Sustainability Report 2019

Snam Company Profile

Snam is one of the world's leading energy infrastructure operators and one of the largest Italian listed companies in terms of capitalization. The company's sustainable and technologically advanced network guarantees security of supply, enables energy transition and promotes development in the areas in which it operates. Through its international subsidiaries, it operates in Albania (AGSCo), Austria (TAG, GCA), China (Snam Gas & Energy Services Beijing), France (Teréga), Greece (DESFA) and the United Kingdom (Interconnector UK). Snam is also one of the main shareholders of TAP (Trans Adriatic Pipeline), the final section of the Southern Energy Corridor.

The company has the most extensive transmission network among European peers (over 41,000 km including international activities) and greatest natural gas storage capacity (approx 20 billion cubic meters, including international activities). It is also one of the main regasification operators in Europe, an activity it carries out through its Panigaglia terminal and its stakes in the Livorno (OLT) and Rovigo (Adriatic LNG) plants in Italy and in the Revithoussa (DESFA) plant in Greece, with a total pro rata regasification capacity of around 8.5 billion cubic metres per year.

As part of its €6.5 billion plan that runs to 2023, Snam is investing €1.4 billion in the Snam Tec project (Tomorrow's Energy Company) which aims to reduce the environmental impact of its activities through innovation (with the aim of a 40% reduction in methane emissions by 2025 and direct and indirect CO_{2eq} emissions by 2030) and contributing to decarbonisation through its new energy transition businesses: sustainable mobility (distributors of compressed natural gas – CNG and bio-CNG – and liquefied natural gas – LNG and bio-LNG, Small-scale LNG), biomethane infrastructure from organic waste and agricultural and agro-industrial waste, energy efficiency services for apartment buildings, the public administration and industry. Snam was the first European company to trial the introduction of hydrogen mixed with natural gas into its network.

The corporate business model is based on sustainable growth, transparency, the development of talent and diversity and the protection and social development of the areas through the Snam Foundation.

(*) The acquisition of a 49.07% share of the OLT regasification terminal was completed on 26 February 2020.

Sustainability Report 2019

Snam's reports

THE ANNUAL REPORT

It provides a comprehensive view both on the financial performances through the Directors' Report, the Consolidated Financial Statement, the Statutory Financial Statement and on the non-financial ones through the Non-Financial Statement drafted according to the 254 Legislative Decree.

THE CORPORATE GOVERNANCE REPORT

It provides detailed information about the company, its governance system and structure, the ownership structure, the internal control and risk management system and related topics.

THE REMUNERATION REPORT

It describes the company's remuneration policy of Directors and Executives specifying the goals, the involved bodies, the procedures for its adoption and implementation in addition to the remuneration paid.

FINANCIAL DISCLOSURE ON CLIMATE CHANGE

It describes the governance, the strategy, the scenarios, the risk and opportunities, the metrics and targets laid out by the company to manage the climate change issue according to the recommendations of the Task Force on Climate Related Financial Disclosure (TCFD).

The Sustainability Report

REPORTING PROCESS

Snam has long started an integration track of its reporting processes because "integrated reporting means integrated thinking". This approach has allowed a comprehensive and integrated overview on all the stakeholders and shareholders demands, offering a wide, transparent and responsible corporate disclosure leading to a complete view on the activities, performances and challenges which Snam faces today.

It's a yearly voluntary document which Snam publishes since 2006 and which aims to describe in a transparent and clear way the company's progresses and points of improvement regarding the environmental, social, economic and governance topics (ESG).
The document is a knowledge instrument to punctually communicate the company's activities and targets achieved in relation to sustainability also referring to the Sustainable Development Goals (SDGs).
The aim of the document is to strengthen the relationship and collaboration with a wide audience of stakeholders (citizens, institutions, communities, media, shareholders, investors, employees, suppliers, customers, authorities…).
The report is drafted according to the Comprehensive option of the Global Reporting Initiative (GRI) Standards.

2019

Contents

Letter to stakeholders

Marco Alverà
Chief Executive Officer

Dear Stakeholders,

in 2019 we were the protagonists in the climate change challenge and in accompanying Italy on its journey to decarbonisation. During the year we once again increased our investments intended for energy transition and innovation, defined new and even more challenging climate goals and we launched our journey for the discovery and introduction of new energy sources.

As part of the new Strategic Plan to 2023 announced in November, we allocated over 20% of investments, equal to €1.4 billion, to the Snamtec project - Tomorrow's Energy Company, in order to increase Snam's presence in the biomethane sector, confirm its commitment to sustainable mobility and energy efficiency and be among the pioneers in the use of hydrogen as the clean energy vector of the future.

2019 has been another year with a strong focus on the issue of climate change, both in terms of public opinion and international institutions and companies. With this in mind we set a target in the Strategic Plan of reducing methane emissions by 40% by 2025 and, for the first time, a target of reducing total CO_{2eq} emissions by 40% by 2030 (Scope 1 and 2 emissions).

In order to achieve these challenging targets and promote interventions and initiatives to transform our infrastructure network focused on methane to an"energy" infrastructure for transporting renewable gas and in combination with the electricity grids.

The Business Unit Energy Transition, dedicated to new green activities (biomethane, sustainable mobility and energy efficiency), was established with the goal of building our future by focusing on new businesses supporting energy transition.

As part of this, in November Snam completed the acquisition of a stake of around 83% in Renerwaste, one of the leading companies in Italy operating in biogas and biomethane infrastructure, which took place through the new wholly-owned company Snam4Environment.

Snam also signed a binding letter of intent aimed at negotiating and defining agreements to launch a strategic partnership in infrastructure for biomethane from agriculture through the entry, with a 50% stake, into Iniziative Biometano, a company operating in Italy with five biogas plants, for which there is a plan for conversion to biomethane, and with various plants in the process of authorisation or construction. The final goal is to specialise and increase expertise in the management and running of plants both in the agricultural biomethane chain and the FORSU chain (organic fraction of municipal solid waste), perfectly complementary to the expertise of IES Biogas, the Snam subsidiary and leader in the design and construction of biogas and biomethane plants in Italy and abroad.

Alongside this, a Memorandum of Understanding was signed with the Infore Environmental Group, an environmental services company listed on the Shanghai Stock Exchange, for potential joint initiatives for the development of biogas and biomethane infrastructure in China.

Investments in 2019 in the biomethane sector are integrated with those planned for the sustainable mobility sector supporting the increase in the Italian network of compressed natural gas and liquefied natural gas distributors. 50 CNG/L-CNG, biomethane and bio-LNG filling stations were contracted at 31 December 2019 through the subsidiary Snam4Mobility, the leader in solutions for natural gas transport refuelling stations. Agreements were signed with Tamoil, in March 2019, and with IP, in July, for the creation, respectively of 5 and 26 new natural gas refuelling facilities in Italy.

As far as energy efficiency is concerned, the sector in which Snam is already one of the leading Italian operators through the subsidiary TEP Energy Solution, we have implemented our role as a leader by gaining control of TEA Servizi, an ESCO (Energy Service Company) active in the design of thermohydraulic and electric plants and in the offering of energy saving solutions for public and private entities. Snam has also promoted awareness-raising initiatives and training to strengthen the culture of energy efficiency and support the commitments undertaken by Italy in this sector.

For Snam, 2019 was "the year of hydrogen": we created the Hydrogen Business Unit, dedicated to the development of this clean energy vector, and, in April, we launched the first trial in Europe of a mixture of 5% hydrogen and natural gas introduced into the Snam transportation network at Contursi Terme (Salerno), doubling the mixture to 10% in December. Convinced of the need to adopt this solution to accelerate decarbonisation, Snam organised The Hydrogen Challenge in Rome last October, an international event during which hydrogen was discussed with the

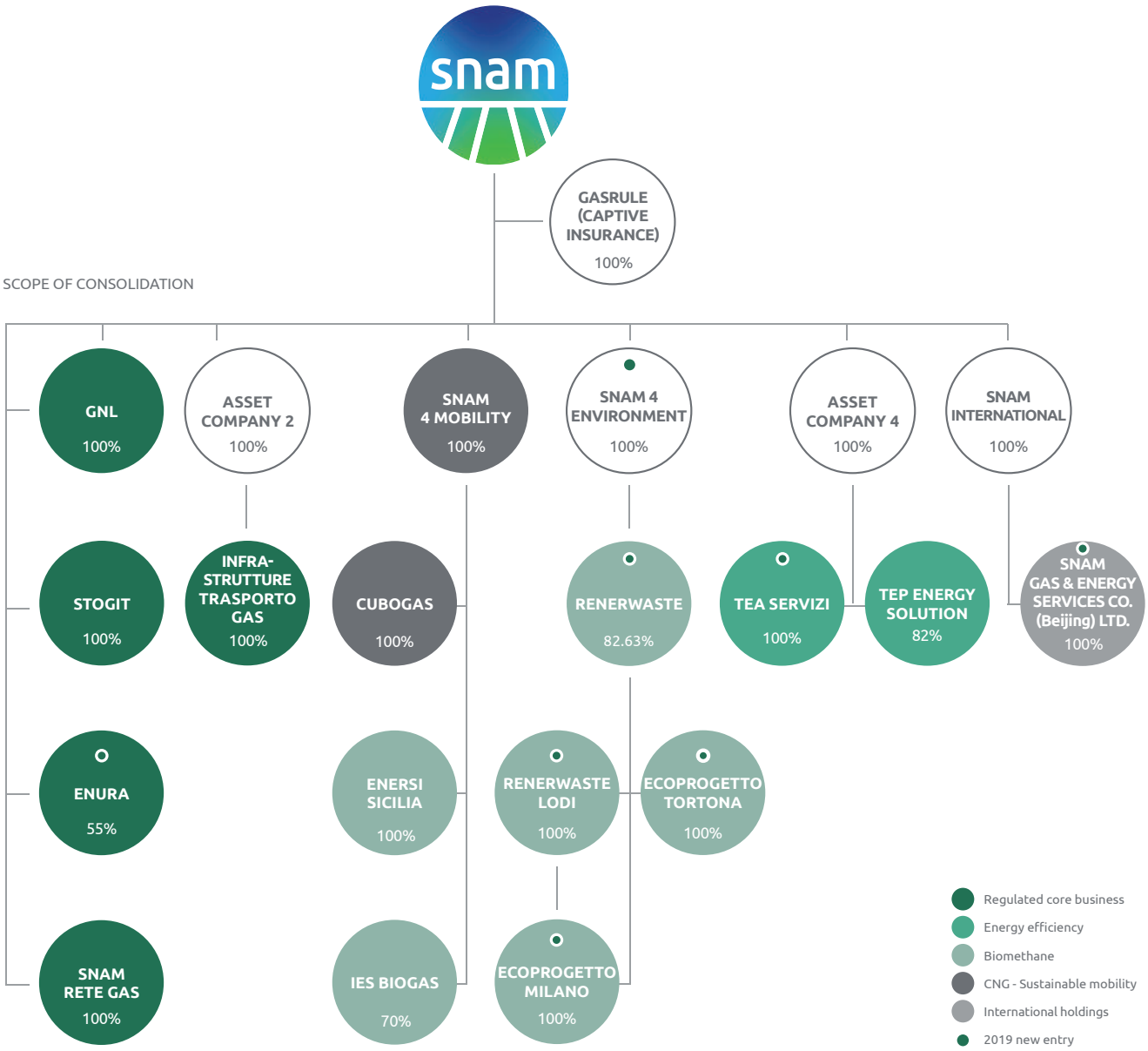
involvement of institutions, associations and businesses from the entire world.
Snam also takes part in numerous institutional and association discussions dedicated to hydrogen, including the Hydrogen Council, a global initiative launched in 2017 at the World Economic Forum in Davos to create a coalition of leading companies committed to accelerating investments in hydrogen, and Hydrogen Europe, which brings together businesses, research institutes and associations at a European level.
Hydrogen, together with LNG and bio-LNG, could also play a vital role in the decarbonisation of maritime transportation: for this reason too we were the first Italian company at the UN in September to join the Zero Coalition promoted by the Global Maritime Forum non profit organisation.
Our commitment on the climate change front was also demonstrated in the area of sustainable finance. In February 2019, Snam successfully concluded the issue of the first Climate Action Bond in Europe for a sum of €500 million, the proceeds of which will be used to finance our green investments in biomethane and in energy efficiency and those related to the improvement of the environmental impact of our activities. Snam also recently became part of the Corporate Forum for Sustainable Finance, an initiative of European businesses established with the aim of creating a network for the exchange of ideas and proposals for the development of sustainable finance, associated with projects that have a positive impact on the environment. Snam aims, through initiatives related to sustainable finance, to consolidate its role in energy transition in Europe, promote market awareness of the company's ESG initiatives and investments and diversify its investor base.
Snam is continuing with its commitment to integrate ESG factors in its value chain: this year, it was the leading Italian listed company to have an ESG committee within its Board of Directors for the integration of these issues into business strategies. In effect, the committee not only supervises sustainability issues closely related to the energy sector, but also issues of particular relevance and importance for Snam such as policies involving human rights, business ethics, integrity, diversity and inclusion as well as sustainable finance initiatives. As a testament to its commitment, in June 2019 Snam was nominated by the Integrated Governance Index annual survey as the best Italian company for corporate governance and integration of ESG (environmental, social and governance) factors in corporate strategies.
In May, Snam was also mentioned in the document produced by the Japanese Chairman of B20 presented at the Tokyo Summit as a "Tangible Example" of companies that set themselves apart through their practical commitment in combating corruption and in October 2019 it became part of the Leadership Committee permanently representing the Business at the OECD (BIAC) in the Anti-corruption Committee.
As far as the environmental challenge is concerned, our commitment to the reduction of our CO_2 emissions and protecting the climate was renewed and we will continue to operate paying great attention and taking care over areas through the implementation of environmental renewal and monitoring activities. Snam has also recently launched the “Snam Plastic Less” programme to reduce the amount of plastic used in the packaging of industrial goods.
We have attached the same importance to the growth and development of our people who are at the heart of our corporate strategy by continuing to invest in training, with over 114 thousand hours, in the Smart Working project and in the Welfare Plan. This commitment has also been recognised under the scope of the “Top Employers” ranking by Statista in conjunction with Forbes. Snam's efforts as far as gender equality is concerned have also been recognised: since January 2020 we have been part of the 325 companies globally included in the Bloomberg 2020 Gender-Equality Index (GEI).
Our commitment to strengthening culture and awareness of health and safety, vital for the outcome and success of our activities, and demonstrated by the low accident indices recorded both for employees and contractors (0.59 frequency index and 0.05 severity index) is also ongoing.
As confirmation of our sustainable development model, we have renewed our allegiance to the Global Compact principles and the SDGs defined by the UN. The performances achieved in terms of ESG have allowed our Company to be included in the most prestigious sustainability indices. Snam was included for the eleventh consecutive year in the Dow Jones Sustainability World Index, as well as being confirmed in the top places in both the FTSE4Good and the CDP Climate Change.
At a time of great change, the year that has just ended demonstrated our desire to look at sustainability and the treatment of all our stakeholders as key elements of our business model, aware of the fact that working together on shared goals will contribute towards achieving the targets that we have set as Snam and as a country, working together on the journey towards decarbonisation.

In the first months of 2020 In Italy, as in other countries of the world, a severe health crisis started due to the pandemic spread of the coronavirus. Since the first news in our country, Snam established a cross -functional team for the management of the difficult time and implemented, with the extraordinary contribution of all its people, necessary actions to ensure the service continuation and the country energy security. The employees went on with their duties remotely working from home thanks to the Smartworking instrument, with a minimum physical oversight to ensure operations. All of this made possible thanks to the necessary information and technology tools. In addition to being close to our people, we wanted also to help our Country contributing with a 20 million euro fund through our Snam Foundation for initiatives in aid of the Italian health system and the third sector which, working in a continuous and extraordinary way, face a situation of extreme emergency.

Snam profile

Snam is the leading operator in Italy and Europe in the creation and integrated management of natural gas infrastructure.
With around 3,000 employees, in Italy Snam oversees the integrated and efficient management of natural gas transportation, dispatching and storage activities, as well as the regasification of liquefied natural gas (LNG). To support the activities related to its core business, the Group is also investing in the development of new businesses, like energy efficiency, green gases such as hydrogen, biomethane and bio-LNG and sustainable mobility, the development of technologies related to compressed natural gas (CNG).
At a European level, Snam operates in the major markets through agreements with the leading industry players and direct equity investments in the share capital of various companies.
Through its solid national and international presence, the Group is actively promoting the use of natural gas and green gases as sources of flexible, safe energy sources with a low environmental impact, playing a vital role for the country's energy system.

SCOPE OF CONSOLIDATION



The new corporate structure

The main changes in the consolidation scope of Snam Group at 31 December 2019, compared with 31 December 2018, consisted of the inclusion of the following companies: (i) Enura S.p.A. (formerly Asset Company 5 S.r.l.), 55% owned by Snam S.p.A., for the construction of the transportation infrastructure in Sardinia; (ii) Snam Gas & Energy Services (Beijing) Co. Ltd., with its headquarters in China, established in April 2019 and wholly-owned by Snam International B.V. to support the development of the gas market in China through the unique expertise of Snam in the industry; (iii) Snam 4 Environment (formerly Asset Company 6 S.r.l.), wholly-owned by Snam S.p.A., established following the acquisition, in November 2019, from Ladurner Ambiente and from AB Invest of 82.63% of Renerwaste S.r.l., one of major companies in Italy in biogas and biomethane infrastructure, with the consequent gaining of control of Renerwaste Lodi S.r.l., Ecoprogetto Milano S.r.l., Ecoprogetto Tortona S.r.l.; (iv) TEA Servizi S.r.l., active in the design, realisation and running of thermohydraulic and electric plants for industrial customers, with a special focus on small and medium-sized businesses, following the acquisition in November 2019 of 100% of the share capital, via the wholly-owned company Asset Company 4 S.r.l.. Except for Enura, subject to consolidation within the "Natural gas transportation" sector, the remaining companies listed above were included in the sector "Corporate and other activities", not subject to separate reporting pursuant to international accounting standard IFRS 8 "Operating segments".

SNAM AND THE ACQUISITIONS IN GREEN BUSINESSES

In recent years, Snam has completed investments for the development of new businesses aimed at promoting decarbonisation and the better use of energy, specifically in the **biomethane** sector (IES Biogas, Renerwaste), **sustainable mobility** (Cubogas) and **energy efficiency** (TEP Energy Solution, TEA Servizi).

Biomethane

IES Biogas is Snam's technological partner since 2018 for the realisation and upgrading on biomethane plants in the agricultural and waste sectors.

IES Biogas

In 2019, IES Biogas was committed to the design and construction in Italy of various plants to produce advanced biomethane, supplied with livestock waste, agro-industrial waste and sub-products of agricultural origin and second harvest crops. This development also has a positive effect on the agri-food industry, promoting a sustainable economic model and significantly reducing agriculture emissions. The waste sector has also become increasingly more strategic: thanks to managerial skills and consolidated know-how, IES Biogas has upgraded the Waste Division engaged in creating two new biomethane plants for motor transport in Mantua and Sicily and in the conversion of other existing plants to biomethane. Since its establishment in 2008, IES Biogas has constructed over 220 plants, both in Italy and abroad.

Renerwaste S.r.l.

In November 2019, through the subsidiary Snam 4 Environment, Snam completed the acquisition from Ladurner Ambiente and from AB Invest of a stake of 82.63% of Renerwaste S.r.l., one of the largest companies operating in Italy in biogas and biomethane infrastructures, for an outlay at the closing, including the repayment of the shareholders' loan, of around €46 million. The transaction, entirely funded

through equity, includes the possibility of Snam acquiring the remaining 17.37% of the share capital owned by Ecopartner from June 2020. Renerwaste with its three plants located, respectively, in the provinces of Lodi, Milan and Tortona, generates annual revenues of more than €20 million and employs around 50 people.

Sustainable mobility

Cubogas

Operating globally in the production and sale of methane gas compression systems, in 2019 it actively contributed to pursuing Snam's strategy on sustainable mobility, both in Italy, supplying compressors for the start-up of the new methane refuelling stations for motor transport, and abroad, where it was awarded, among other things, a substantial tender to supply 23 compressors in Greece and another two tenders in France to supply 6 compressors for the RATP public transport vehicles, a Parisian company operating throughout the Île-de-France region.
Cubogas also produces domestic systems, which allow the refuelling of vehicles directly, at home or at work. It involves reasonably small systems that are simple to install, that can be adapted to the domestic or corporate gas or electricity grid and are therefore ideal for refuelling the fleets of companies or small municipalities. In 2019, one of these compressors was installed at the Snam HQ in San Donato Milanese and many more will follow at other premises throughout Italy.
In 2019, Cubogas also made investments aimed at increasing its production capacity, expanding and innovating its range of products as well as improving the quality of the maintenance service provided to its customers.
In addition to the compression of methane for motor transport use, Cubogas also contributes to the development of biomethane, providing its customers with technological solutions to compress the gas produced by the plants and enable them to be introduced into the transportation network. In this context, Cubogas works in harmony with IES Biogas and Snam 4 Environment within Snam's Energy Transition Business Unit.

Energy efficiency

Tep Energy Solution

An ESCo (Energy Service Company), accredited at Gestore dei Sistemi Energetici S.p.A. (GSE), which is mainly involved with energy requalification and deep renovation operations for apartment buildings and industrial sites for civil and service sector use. These interventions are designed to optimise the energy performance of buildings/facilities with a consequent reduction in energy consumption and the impact on the environment of corporate operations and processes.

TEA Servizi

On 11 November 2019, through the wholly-owned company Asset Company 4 S.r.l., Snam completed the acquisition of 100% of the share capital of TEA Servizi S.r.l. (TEA), Energy Service Company (ESCo) active in the design, construction and running of thermohydraulic and electric plants for industrial customers, with a special focus on small and medium businesses. The initiative allows Snam to integrate its range of services offered to industrial customers, adding the expertise of plant engineering design, running and maintaining the current proposal developed through TEP Energy Solution.

The international infrastructure system and Snam's role

International growth aims to consolidate the European infrastructure system facilitating the alignment between the consumer and producer interests, promoting a greater liquidity in the South-European gas market also through the development of new routes, and preserving the connection between the United Kingdom and continental Europe.
The Company operates abroad through its subsidiaries in Albania (AGSCo), Austria (TAG, GCA), China (Snam Gas & Energy Services Beijing), France (Teréga), Greece (DESFA) and the United Kingdom (Interconnector UK). It is one of the main shareholders of TAP (Trans Adriatic Pipeline) and the main player involved in planning the creation of the Energy Union.
The leader in Europe through the extensiveness of the natural gas transportation network (over 41,000 km) and storage capacity (more than 20 billion cubic metres), Snam manages the major liquefied natural gas (LNG) facility built in Italy and is a shareholder of Adriatic LNG, the main terminal in the country and one of the most strategic in the Mediterranean which, together with its investment in DESFA, through the Revithoussa facility, gives a total pro rata regasification capacity of around 7 billion cubic metres per year.

Snam’s presence in Italy

Snam is the leading Italian natural gas transportation and dispatching operator owning almost all of the transportation infrastructure in Italy, with around 32,600 kilometres of medium and high-pressure gas pipelines.

SNAM'S PRESENCE IN THE NATIONAL AND INTERNATIONAL INFRASTRUCTURE SYSTEM

2012

1 Interconnector (23.54%) through Snam International BV

235 km undersea pipeline between Bacton (UK) and Zeebrugge (Belgium)

1 terminal and 1 compression station both in Bacton and Zeebrugge

2013

2 Terēga (40.5%)

5,080 of network with 6 compression stations

Around 16% of the total volume of gas in France

5.8 billion bcm of storage capacity (working gas 2.8 bcm), around 25% of the national capacity

2014

3 TAG (84.47%)

3 parallel pipelines about 380 km long each

5 compression stations

2015

4 TAP (20%)

Asset under development: final section of the South Gas Corridor from Azerbaijan to Europe

878 km (773 km on-shore e 105 km off-shore) through Greece, Albania and the Adriatic Sea before reaching Italy

2 compression stations (Initial capacity of 10Bcm/year, which can be increased to 20 Bcm/year)

Expected to come into service in Q4 2020

2016

5 GCA (49% via AS Gasinfrastructure)

564 km of transportation network

322 km of distribution network

5 compression stations

2018

6 DESFA (66% via Senfluga)

1,466 km of transportation network:

2 entry point (Bulgaria and Turkey)

1 LNG entry point (Agia Triada)

1 LNG terminal, regasification capacity 6bcm/year

1 compression station

INFRASTRUCTURE IN ITALY

NATURAL GAS TRANSPORTATION

ENTRY POINT / REVERSE FLOW	8
COMPRESSION STATION	13
PIPELINES UNDER OPERATIONS	

NATURAL GAS STORAGE

OPERATING CONCESSIONS	9

LNG REGASIFICATION

REGASIFICATION PLANT	1

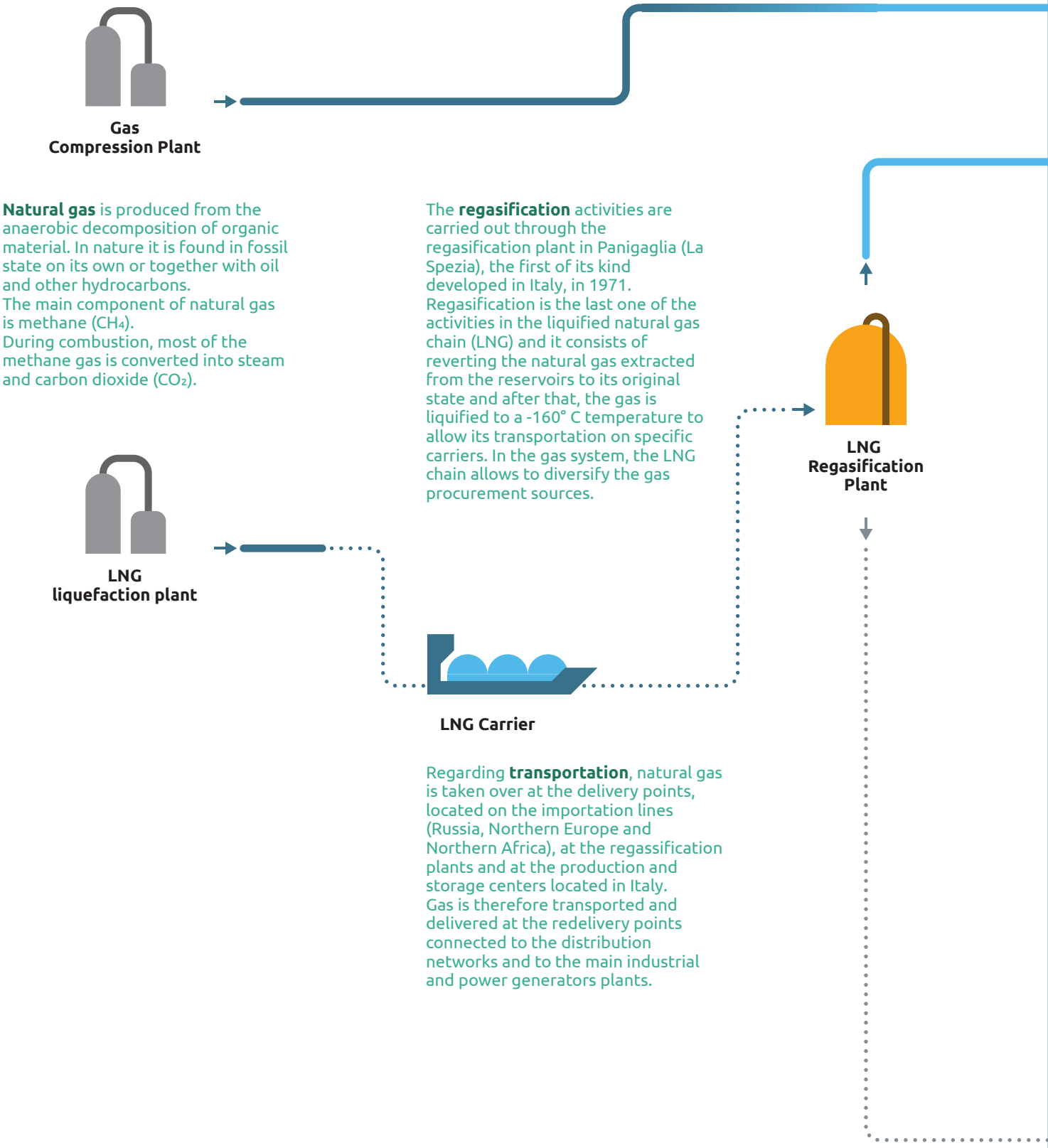
INVESTMENTS OVERSEAS

- INTERNATIONAL PIPELINES
- COMPRESSION STATION
- STORAGE FIELDS
- REGASIFICATION PLANT

OTHER OPERATORS

- INTERNATIONAL PIPELINES

A WORLD RUNNING ON GAS AND SNAM'S ROLE



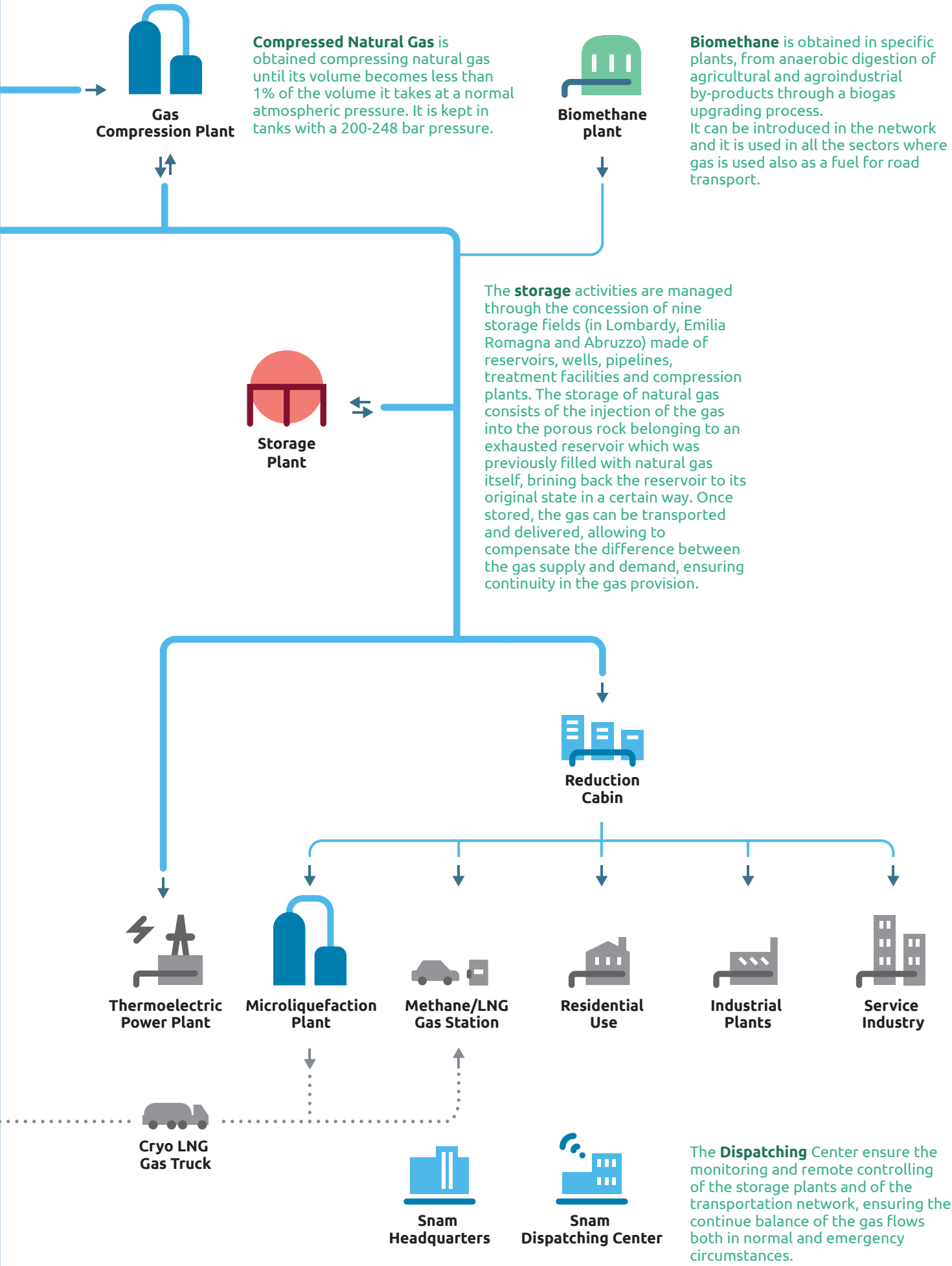
Natural gas is produced from the anaerobic decomposition of organic material. In nature it is found in fossil state on its own or together with oil and other hydrocarbons.
The main component of natural gas is methane (CH_4).
During combustion, most of the methane gas is converted into steam and carbon dioxide (CO_2).

The **regasification** activities are carried out through the regasification plant in Panigaglia (La Spezia), the first of its kind developed in Italy, in 1971.
Regasification is the last one of the activities in the liquified natural gas chain (LNG) and it consists of reverting the natural gas extracted from the reservoirs to its original state and after that, the gas is liquified to a -160° C temperature to allow its transportation on specific carriers. In the gas system, the LNG chain allows to diversify the gas procurement sources.

Regarding **transportation**, natural gas is taken over at the delivery points, located on the importation lines (Russia, Northern Europe and Northern Africa), at the regassification plants and at the production and storage centers located in Italy.
Gas is therefore transported and delivered at the redelivery points connected to the distribution networks and to the main industrial and power generators plants.

Snam Activities

Other Activities

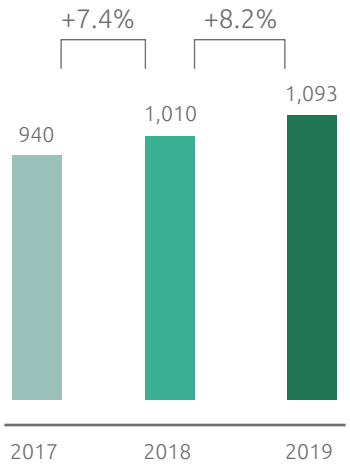

Gas
Compression Plant
Compressed Natural Gas is obtained compressing natural gas until its volume becomes less than 1% of the volume it takes at a normal atmospheric pressure. It is kept in tanks with a 200-248 bar pressure.
Biomethane plant
Biomethane is obtained in specific plants, from anaerobic digestion of agricultural and agroindustrial by-products through a biogas upgrading process.
It can be introduced in the network and it is used in all the sectors where gas is used also as a fuel for road transport.
Storage Plant
The storage activities are managed through the concession of nine storage fields (in Lombardy, Emilia Romagna and Abruzzo) made of reservoirs, wells, pipelines, treatment facilities and compression plants. The storage of natural gas consists of the injection of the gas into the porous rock belonging to an exhausted reservoir which was previously filled with natural gas itself, brining back the reservoir to its original state in a certain way. Once stored, the gas can be transported and delivered, allowing to compensate the difference between the gas supply and demand, ensuring continuity in the gas provision.
Reduction Cabin
Thermoelectric Power Plant
Microliquefaction Plant
Methane/LNG Gas Station
Residential Use
Industrial Plants
Service Industry
Cryo LNG Gas Truck
Snam Headquarters
Snam Dispatching Center
The Dispatching Center ensure the monitoring and remote controlling of the storage plants and of the transportation network, ensuring the continue balance of the gas flows both in normal and emergency circumstances.

Business activities

	Operating figures	Unit of measurement	2017	2018	2019	% change
Transportation	Gas pipeline network in use	km	32,584	32,625	**32,727**	**0.31**
	of which national network	km	9,704	9,697	**9,727**	**0.31**
	of which national network	km	22,880	22,928	**23,000**	**0.31**
	Natural gas injected into the network	Billion m^3	74.59	72.82	**75.37**	**3.50**
	of which imported	Billion m^3	69.35	67.70	**70.86**	**4.67**
	of which national production	Billion m^3	5.24	5.12	**4.51**	**-11.91**
	Installed power in the compression stations	(MW)	902	961	**961**	**-**
Storage	Natural gas moved through the storage system	Billion m^3	19.92	21.07	**19.33**	**-8.26**
	of which injected into storage	Billion m^3	9.80	10.64	**10.16**	**-4.51**
	of which supplied from storage	Billion m^3	10.12	10.43	**9.17**	**-12.08**
	Total storage capacity	Billion m^3	16.7	16.9	**17.0**	**0.59**
	of which available	Billion m^3	12.2	12.4	**12.5**	**0.81**
	of which strategic	Billion m^3	4.5	4.5	**4.5**	**-**
Regasification	Regasified gas	Billion m^3	0.63	0.91	**2.40**	
	Methane tanker loads	no.	15	21	**57**	
	Daily regasification maximum capacity	m^3	17,500	17,500	**17,500**	**-**
Employees	Employees in service at the year-end	no.	2,919	3,016	**3,025**	**0.30**
	of which Transportation	no.	1,972	1,915	**1,945**	**1.57**
	of which Storage	no.	60	59	**61**	**3.39**
	of which Regasification	no.	63	64	**65**	**1.56**
	Corporate and other activities	no.	824	978	**954**	**-2.45**

KEY FINANCIAL FIGURES [1]

Adjusted EBIT (mln €)



In 2019 Snam demonstrated it was in line with its expectations and those of its investors, achieving positive results thanks to the rigorous and efficient management of its financial assets. As evidence of this, EBIT rose 0.9% compared with 2018, reaching €1,417 million.

Adjusted net profit stood at €1,093 million, an increase of €83 million compared with 2018 (+8.2%). This increase, in addition to the greater EBIT (€12 million, +0.9%), is due to lower net financial expense (+€30 million or 15.4%), thanks to the benefits of the actions designed to optimise the existing financial structure. In addition, the positive market conditions and the greater net income from equity investments (€57 million or +35.8%), thanks to the contribution of Senfluga, a company purchased in December 2018, and Teréga, contributed to achieving this result. These effects were partly absorbed by higher income taxes, -€16 million, mainly attributable to the greater pre-tax profit. Net financial debt was €11,923 million as at 31 December 2019, compared with €11,548 million as at 31 December 2018.

Added Value produced and distributed

For Snam, sustainability and creation of value are closely related concepts: sustainability creates value for the company and stakeholders, bringing together the business and social responsibility of the company. Through its activities, Snam produces wealth that contributes, directly and indirectly, to the economic growth of the context in which it operates. This wealth is often expressed in terms of Added Value produced and distributed to its reference stakeholders.

Snam calculates the Added Value based on the standard prepared by the Gruppo di Studio per il Bilancio Sociale (GBS) (Sustainability Report Study Group) and GRI Standards, the national and international reference frameworks, respectively, for identifying and calculating the sustainability indicators of a business. Specifically, the GBS is an association dedicated to the development and promotion of scientific research into the Sustainability Report and issues relating to responsible management processes for businesses

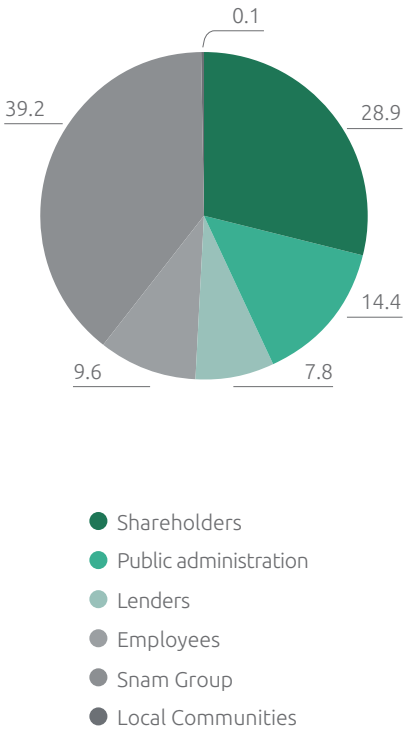
The Added Value is calculated based on the values taken from the legally-required Income Statement, thereby becoming a useful tool for all stakeholders in understanding the economic impacts that the Group produces. In 2019, the gross global Added Value produced was **€2,695 million**, an increase of €163 million compared with 2018 (**+ 6.4%**).

The Added Value (€ Million)

	2017	2018	2019
Added Value produced (A)	2,447	2,532	**2,695**
Added Value distributed (B)	1,621	1,634	**1,639**
Employees	249	280	**258**
Local community (Donations and sponsorship Statutory environmental compensation)	5	3	**3**
Lenders (Bondholders and Banks)	292	249	**211**
Shareholders	732	746	**780**
Government	343	356	**387**
Direct taxes	329	341	**375**
Indirect taxes	14	15	**12**
Added Value retained within the Company (A) - (B)	826	898	**1,056**

1) For more details, see the 2019 Annual Financial Report

Distribution of added value (%)



The 39.2% of gross global Added Value produced was **reinvested within the Group** and is 3.7% higher than 2018. Of this, around 68.4% was allocated to **the depreciation of assets**. Regarding the main reference stakeholders, 2019 saw a 2% reduction in the value distributed to lenders (7.8%), due to a reduction in financial expense following the actions to optimise the financial structure launched in the previous three-year period and, specifically, the liability management operations. The value distributed to shareholders (28.9%), through the dividends paid, was consistent with the 2018 figure (29.5%). In order to guarantee attractive and sustainable remuneration for shareholders, Snam bought treasury shares, under the scope of the share buyback programme, reducing the outstanding number of shares and contributing to the growth in value of a single share by 5% compared with 2018.

With reference to **employees** (9.6%), the distribution took place directly, through salaries, wages and employee severance indemnity, and indirectly through social security contributions and staff-related costs (canteen services, reimbursement of travel expenses). There was a reduction in the Added Value distributed to employees, equal to -1.5% compared with 2018, due to the extraordinary components reported in 2018, relating to costs for redundancy packages, with the application of the early retirement tool regulated by Article 4, paragraphs 1-7 of Law 92/2012 the Fornero Law.

The value allocated to the **Public Administration** (14.4%) through the payment of direct and indirect taxes was essentially stable (+0.4% compared with 2018). Lastly, an amount of approximately €3 million was designated for **local communities** (0.1%) through donations and sponsorship and environmental compensation pursuant to the law.

RELATIONS WITH THE FINANCIAL COMMUNITY

Snam considers maintaining constant relations with investors and the entire financial community as strategic for its reputation. In this respect, it is constantly committed to disseminating comprehensive and timely information, capable of effectively representing the business's strategy and performance, enhancing the dynamics that ensure the creation of value over time.

2019 Engagement activity

In addition to the normal activities in presenting the Strategic Plan and conference calls upon the publication of the Company's results (annual, half-year and quarterly) during 2019, the following were carried out:

11 road shows and 6 reverse road shows to meet shareholders and institutional investors in the major financial centres of Europe and North America;

15 industry conferences allowing investors specialized in the utilities and infrastructure sectors to meet the Company's senior management;

Meetings with more than **210 institutional investors** during the year, corresponding to more than 40% of shares owned by active operators.

Climate action bond

The **Eligible Projects** are available on the Snam website at the link: www.snam.it/en/Investor_Relations/debt_credit_rating/climate_action_bond.html

On 21 February 2019, Snam successfully concluded the issue of its first Climate Action Bond (CAB), the proceeds of which will be used to finance and, in part, refinance the so-called eligible projects, namely the projects defined in the Snam Climate Action Bond Framework (hereinafter also the Framework) published on Snam's website.

These projects must comply with some set targets relating to their ESG performance (Environment, Social and Governance) and were classified in the following four main categories:

1. **Carbon & Emission Reduction Projects:** installation of new technologies, systems, equipment and processes which involve a reduction in the use of energy and emissions in industrial facilities;
2. **Renewable Energy Projects:** construction of biomethane facilities and upgrading of existing biogas facilities in Italy and abroad;
3. **Energy Efficiency Projects:** energy efficiency projects for Snam buildings or in relation to its supply chain;
4. **Green Development Projects:** development projects for new buildings and maintaining green areas.

The value of the CAB is €500 million, and it matures on 28 August 2025 and it is aimed at very important institutional investors with a wide geographical diversification. The annual coupon of the bond is 1.25% with a re-offer price of 99,489 (corresponding to a spread of 103 basis points at the reference mid swap). In December 2019 Snam's CAB was also listed on the Borsa Italiana ExtraMOT segment.
Through this issue, Snam wanted to consolidate its role in the context of energy transition in Europe, raise the awareness of investors concerning its investments and initiatives as part of ESG and diversify its investor base.
The issuing of the CAB was supported by a preventive check by a third-party certification body that confirmed that the use of the proceeds of the bond is in line with the project categories defined in the framework.
For the entire term of the bond until its maturity, Snam will report and annually publish the ESG performance of the bond, with reference to the gradual allocation of the income from the bond in relation to the projects selected in a special document called the CAB Report. This report is subject to a limited external assurance in accordance with standard ISAE 3000 and in line with the requirements of Green Bond Principles.

ESG INDICES AND RATINGS

Snam's presence in sustainability indices

MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM	For the eleventh year in a row, Snam's stock is listed in the Dow Jones Sustainability World Index, the world's most important stock market index assessing corporate social responsibility.
FTSE4Good	Snam's is once again present in the FTSE4Good, where it has been listed since 2002, an index created by the FTSE Group to encourage investment in companies that meet globally recognised social responsibility standards and is an important point of reference to establish benchmarks and ethical portfolios.
ETHIBEL EXCELLENCE	Snam's listing is confirmed in the Ethibel Sustainability Index (ESI) Excellence Europe and in the Ethibel Sustainability Index (ESI) Excellence Global. Confirmed once again on the Ethibel PIONEER and Ethibel EXCELLENCE Investment Registers: the selection made by the Ethibel Forum indicates that Snam is one of the leading companies in the industry in terms of CSR.
MSCI 2015 Constituent MSCI Global Sustainability Indexes	Snam's listing has been confirmed for the fifth year running in the two sustainability indexes MSCI ACWI SRI Index and MSCI ACWI ESG Leaders, by MSCI, an international leader providing IT tools to support the investment decisions of global investors. The MSCI Global Sustainability indices includes companies having high sustainability ratings in their affiliated sectors.
STOXX ESG LEADERS INDICES	For the tenth consecutive year Snam stock came to form part of the STOXX Global ESG Leaders Indices, a group of indices based on a transparent process of selection of the performance, in terms of sustainability, of 1,800 companies listed worldwide.
ECPI Sense in sustainability	Snam is included in five of the main ECPI sustainability indexes. Snam's inclusion in the family of ECPI indices dates back to 2008. The ECPI methodology consists in screening based on testing more than 100 ESG (Environmental, Social and Governance) indicators
EURONEXT vigeo eiris INDICES WORLD 120	Snam is confirmed to be included in 2019 as well in the (Europe, Eurozone, World) NYSE Euronext Vigeo 120 indices, managed by Vigeo, a leading company at a European level in rating companies regarding CSR issues.
100 Sustainability Stock Index	Snam was also listed, in 2019, for the sixth year running, in the United Nations Global Compact 100 index (GC 100), developed by the United Nations Global Compact with the research firm Sustainalytics, which includes the 100 companies that have distinguished themselves at the global level both for attention to sustainability issues and to financial performance, and that adhere to the ten fundamental principles of the United Nations on the human rights, labour, environment and anti-corruption issues.

ESG ratings

CDP DISCLOSURE INSIGHT ACTION	Snam was included for the seventh consecutive year among the highest scorers of CDP, a non-profit organisation which is one of the most important internationally for climate change and was also included on the A List.
CDP SUPPLY CHAIN MEMBER	Snam joined the CDP supply chain programme for the first time, the CDP programme aimed at the involvement of its supply chain in the climate change questionnaire. Snam got a score of A-, demonstrating the commitment of its suppliers in engagement activities involving issues related to the reduction of emissions and the development of sustainable strategies.
Corporate Responsibility Prime rated by oekom research	In 2018, Snam was confirmed at "PRIME" level (with rating B-) by Oekom research, a leading international agency rating socially responsible investments, which operates on behalf of institutional investors and financial services companies.
SUSTAINALYTICS	Snam was confirmed again in 2019 in the Sustainalytics index, a leading ratings agency that evaluates companies from an ESG perspective, which the company has been part of since 2013.

The pursue of a new energy

Today and tomorrow's challenge. Hydrogen and green gases

Climate altering emissions are increasing, targets are not being met and there is an urgent need to redefine global policies to curb the consequences of climate change in the short, medium and long-term: this is the alarming scenario outlined in recent years which, at the same time, represents one of the greatest challenges in the history of humanity.
To mitigate these effects it will be necessary to develop an economic system based on a progressive decarbonisation, gradually reducing the use of fossil fuels, starting with the most polluting, such as, for example, coal, focusing on the use of more efficient energy in order to curb consumption and promote the development and use of renewable and alternative energy sources.

For this reason, at the Paris Climate Conference (COP21) in December 2015, 195 countries adopted the first universal and legally binding agreement on climate change at a global level. The agreement defines a global action plan to keep the average annual global temperature increase to within 1.5% compared with pre-industrial levels. The European Union formally ratified the Paris Agreement of October 2016 and defined and expressed its commitment within the framework of the Clean energy for all Europeans Package by 2030 and the EU 2050 Climate Long-term Strategy, which aim not only to reduce CO_2 emissions (-40% by 2030 and -100% by 2050), but also increase the share of energy produced from renewable sources (+32% by 2030) and improve energy efficiency (+32.5% by 2030).
The greater ambition in the area of energy and climate is broadly mirrored in the European Green Deal document. It is a paper, of a non-legislative nature, prepared by the new European Commission team, that took up office on 1 December 2019. The EU Green Deal summarises the collection of initiatives that the new European Commission intends to adopt during its term in office (2019 - 2024) in order to set out on the journey to climate neutrality by 2050.

Among the various initiatives planned, note, by way of example, the future adoption of the European Climate Law, aimed at defining the target of climate neutrality by 2050 in a binding manner in EU legislation. There are also plans to publish a specific plan aimed at improving the goal of reducing emissions by 2030 to between 50% and 55% (compared with the 1990 levels), with the consequent need to reshape some of the main EU legislative acts on energy and climate (for example, the Emission Trading System, Energy Efficiency and Renewable Energy Directives).

The intention of the European Commission is also to reshape the current Gas Directive with the goal of facilitating the decarbonisation of the industry through the definition of a competitive green gas market and dealing with the issue of methane emissions. In this context, Snam has chosen to take a leading role in the energy transition imposed by the Paris agreements and by the objectives defined at EU level, not only through the continued growth of its business, thanks to the example of the progressive phasing out of coal, but also and, above all, through the development of green gases such as hydrogen, biomethane and synthetic methane.

The scenarios

By producing forward-looking energy scenarios, Snam presents a vision of possible developments of the Italian energy system in the medium-long-term (2030, 2040 and 2050) that takes into consideration the energy and environmental policy guidelines nationally and at an EU level. Specifically, these scenarios are consistent with the national renewable energy, emissions reduction and energy efficiency targets to 2030 in the **Integrated National Plan for Energy and Climate** (PNIEC).

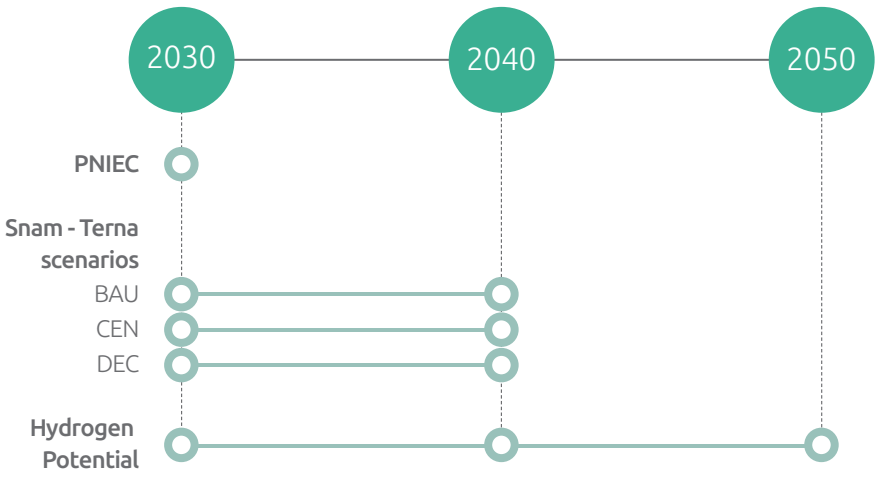
Snam scenarios

In order to develop a business strategy that is in line with the European and national decarbonisation targets and with Snam's commitment to energy transition, the company has developed medium-long-term energy scenarios: the **"Snam-Terna joint energy scenarios"** to 2040, as a prerequisite for the preparation of development plans for the transmission and transportation networks, and the **"Hydrogen potential"** that evaluates the potential of hydrogen in Italy to 2050 produced with the analytical support of McKinsey.

Snam-Terna joint energy scenarios
Snam developed the "Document describing the 2019 scenarios" in collaboration with Terna, the operator that manages the electricity transmission networks in Italy in conformity with resolutions 654/2017/R/EEL and 689/2017/R/GAS. This study represents the result of the analyses conducted by Snam and Terma to obtain a vision that is consistent with the possible Italian energy system developments by 2040, a prerequisite for the preparation of the electricity and gas sector transmission and transportation network development plans in Italy.

Scenario – "Hydrogen Potential"
Snam presented a study into the potential of hydrogen as an energy transition vector in Italy at the "Hydrogen Challenge" event held on the 10th of October 2019 in Rome. The study analyses the potential of hydrogen in the future for the national energy system and highlights its key role in achieving the decarbonisation goals.

Time horizon of the scenarios considered by Snam

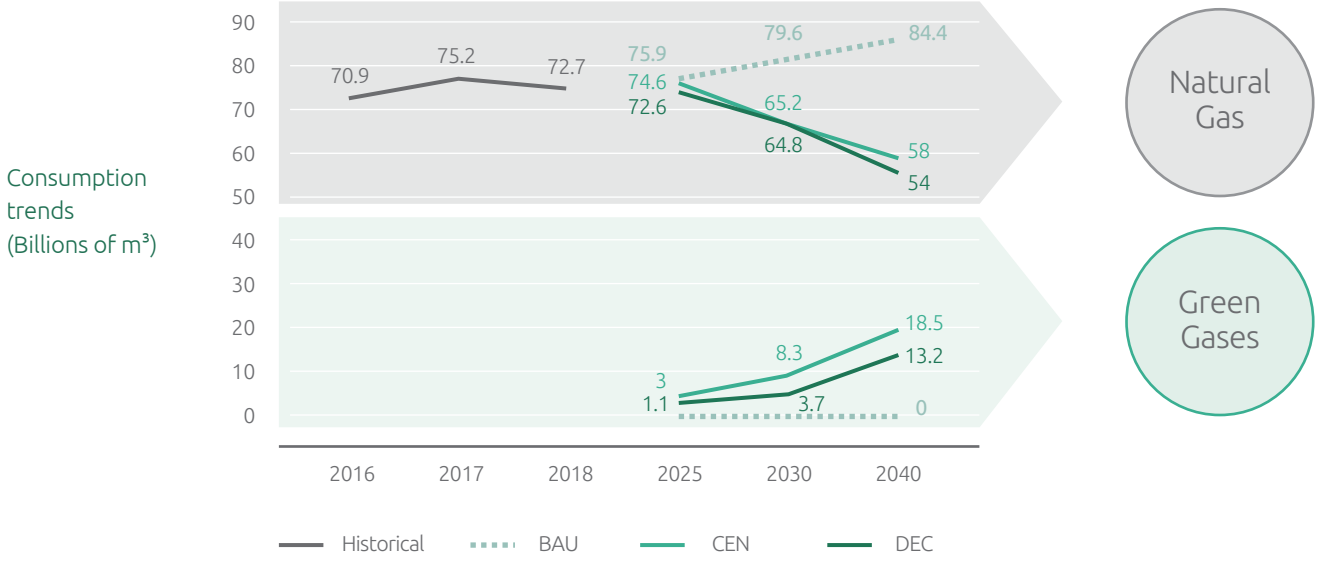


Source: Snam - Terna, "Document Describing 2019 Scenarios"

PNIEC: Integrated National Plan for Energy and Climate
BAU: Business-as-usual scenario
CEN: Centralized scenario
DEC: Decentralized scenario

The Snam-Terna joint energy scenarios have made it possible to pool the specific expertise of the two operators, in the awareness that the interaction between scenarios in the electricity and gas sectors constitutes a new, very complex feature, both nationally and at EU level. The results collected in the **Document Describing the Scenarios** (DDS 2019), show how collaboration and the synergies between the electricity sector and the gas sector could be key in achieving the emission reduction targets.
Specifically, the study conducted jointly by the two operators led to the development of three different scenarios: the Business-As-Usual (BAU) scenario, the Centralized scenario (CEN), and the Decentralized scenario (DEC).
The BAU scenario features a technological mechanism for switching to more efficient technologies, guided purely by the market and a reduction in costs, and does not include reaching the European and national energy reduction targets.
The CEN and DEC development scenarios, on the other hand, represent a guide for defining a long-term business strategy aimed at decarbonisation. The two scenarios are rooted in the same macroeconomic context, with relatively sustained growth of 1.2% for the GDP per year and of the population (+2.4 million inhabitants by 2040) and significant investment in energy efficiency and technological development. Both scenarios are driven by achieving the European emission reduction targets by 2030 and move forward on a path that allow to reach the long-term CO_2 containment requirements laid down in the European Commission "2050 long term strategy ". Specifically, in the CEN scenario, the policy goals are reached thanks to curbing consumption and the development of renewable energies with significant availability of programmable renewable resources, such as green gases, leveraging the existing gas infrastructures, while the DEC scenario envisages the increased development of consumption electrification associated with the distribution of the generation distributed by non-programmable renewable energy sources.

Future natural gas and green gas (biomethane, hydrogen and synthetic methane)



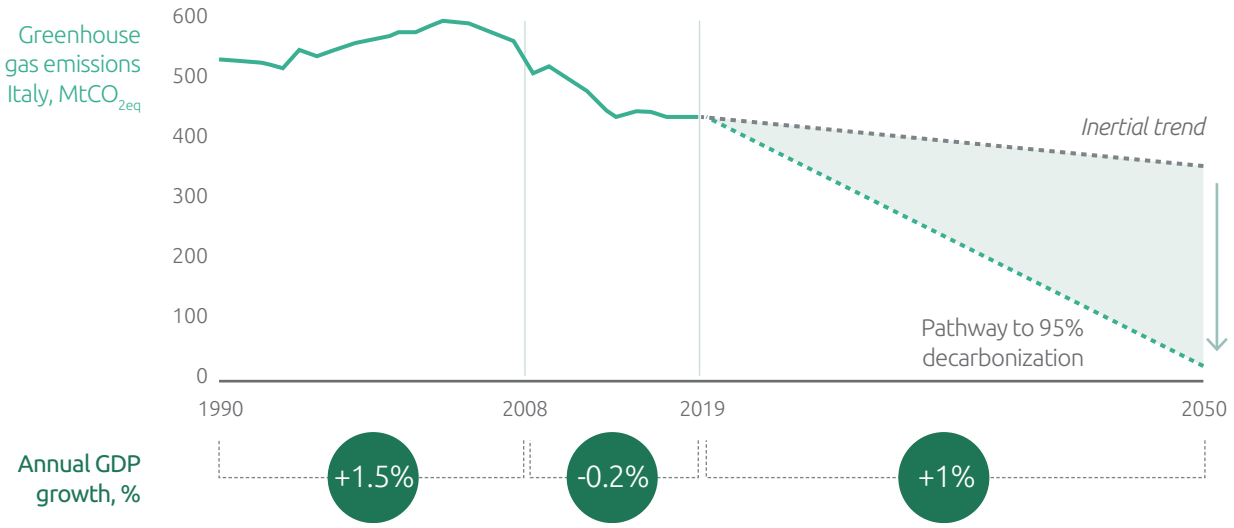
Source: Snam-Terna, "Document Describing 2019 Scenarios"

Also note that for both scenarios, the ambitious decarbonisation targets require the progressive penetration of increasing quantities of green gas in the Italian energy mix, leveraging biomethane, hydrogen and synthetic gases.
The scenarios present different gas demand trends: increasing in the BAU scenario compared with current demand – 73 billion m^3 in 2018 – stable in the CEN scenario and decreasing in the PNIEC and the DEC scenarios. Both the DEC and CEN scenarios involve the European decarbonisation targets using increasingly more green gases in the Italian energy mix, relying on hydrogen, biomethane and synthetic methane.

Specifically, it is estimated that in 2030 the demand for green gas will be 8.3 bcm in the CEN scenario and 3.7 bcm in the DEC scenario. By 2040 there is expected to be further growth in the demand for green gas, equal to 18.5 bcm in the CEN scenario and 13.2 bcm in the DEC scenario. Green gases will partly replace natural gas, not only in thermoelectric power plants, but also with end users: civil, industrial and transportation.

To achieve the **"zero emissions" target** by 2050, in the context of economic growth of 1% of the GDP to 2050, Italy should make reductions equal to 420 Mt of CO_2 equivalent (-95% compared with now).

Analysis of the development of CO_{2eq} emissions to 2050 in Italy

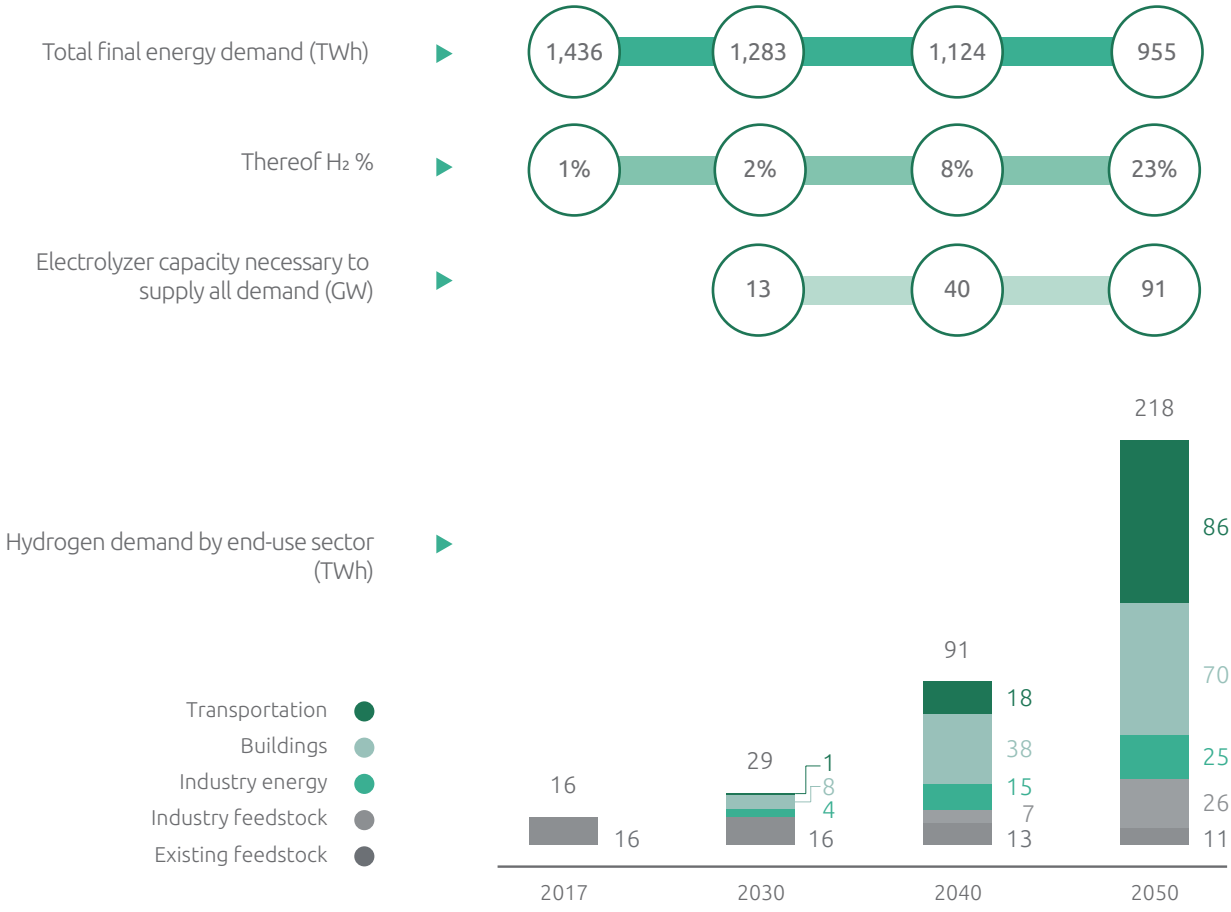


Source: Snam, 2019, "The Hydrogen Challenge: The potential of hydrogen in Italy".

"The Hydrogen Potential" study carried out with the analytical support of McKinsey, highlights how the difficulty of reducing emissions by 95% compared with 1990 is mainly due to the presence of so-called hard-to-abate sectors that cannot be totally decarbonised through the use of non-programmable electrical renewables, and which are currently responsible for 45% of domestic emissions. Hydrogen can be used in many of these sectors, for example as a fuel for heavy goods vehicles, for heating buildings or as feedstock for several industrial processes (e.g. steelworks, ammonia production). It can also offer flexibility services to the electrical system, through solutions such as Power to Gas that allows excess electricity to be converted into hydrogen, which is easier to store and transport, also exploiting some of the existing infrastructures.

The "Hydrogen Potential" scenario estimates that by 2050 hydrogen could satisfy the 23% of the total energy demand for end users in Italy. According to this study, hydrogen would be increasingly more competitive compared with fossil fuels and other decarbonisation alternatives, especially in certain sectors such as, for example, transportation, heating and high-temperature industrial processes.

Development of the demand for hydrogen in Italy to 2050 in different sectors



Source: Snam, 2019, "The Hydrogen Challenge".

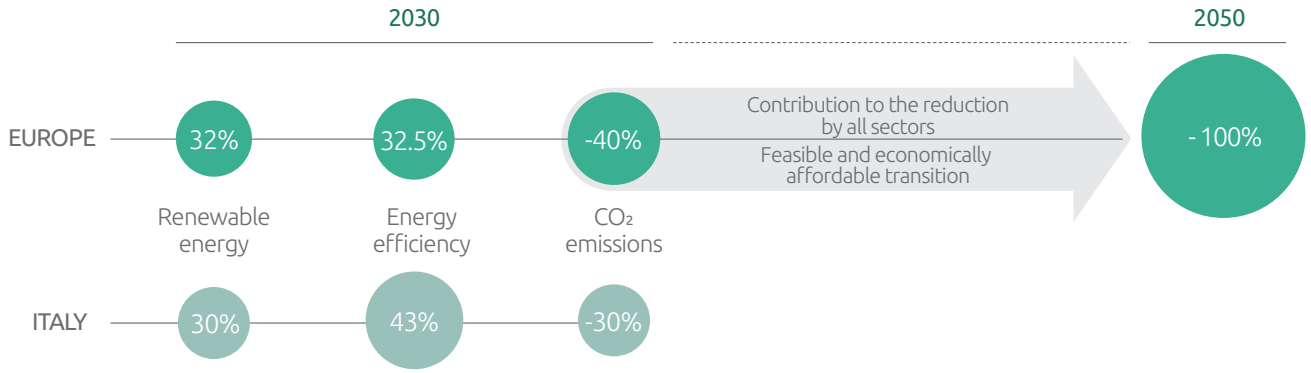
Global commitment in the fight against climate change

The strong correlation between human activity and global warming is increasingly visible and confirmed in the latest report of the Intergovernmental Panel on Climate Change (IPCC), which highlights an increase in current average global temperatures of around 1°C compared with pre-industrial levels, and 1.5°C between 2030 and 2052. The trend is obvious if you consider that, on analysing the average temperatures recorded from the 80s until now, every decade has been warmer than the previous one and the last ten years have been by far the hottest in history. The rise in temperatures will continue for centuries, causing complex changes in the climate system, such as the rise in sea levels, extreme phenomena, droughts, heavy rainfall, with risks and impact levels that differ according to the geographical location, vulnerability, levels of development and adaptation policies, resilience and mitigation of individual countries.

This is the cry of alarm that the international community launched at the UN conference on climate change, known as COP25, inaugurated in Madrid on 2 December 2019. In anticipation of the crucial 2020 deadlines established in the Paris Agreement, the leaders focused global attention on the climate emergency and the urgent need to significantly extend arrangements to achieve the three main climate goals: reduce emissions by 45% by 2030; achieve climate neutrality by 2050 and stabilise the increase in global warming to within 1.5° C.
The data and estimates of the World Meteorological Organization (WMO), highlight the difficulties in achieving these international targets. In 2018 global atmospheric concentrations of greater greenhouse gases (carbon dioxide, methane and nitrogen oxide) reached record levels. Specifically, CO_2 reached 407.8±0.1 parts per million, an amount equal to 147% compared with pre-industrial levels. In order to reach the emission reduction targets outlined in the Paris Agreement and suggested by organisations that are experts on these issues, such as the IPCC and the IEA, the European Union defined and expressed its commitment within the framework of the Clean energy for all Europeans Package by 2030 and the EU 2050 Climate Long-term Strategy, which aim not only to reduce CO_2 emissions (-40% by 2030 and -100% by 2050), but also increase the share of energy produced from renewable sources (+32% by 2030) and improve energy efficiency (+32.5% by 2030).

The greater ambition in the area of energy and climate was widely accepted by the new EU Commission, which took office on 1 December 2019, in its European Green Deal (a document of a non-legislative nature). The EU Green Deal summarises the collection of initiatives that the new EU Commission intends to adopt during its term in office in order to set out on the journey to climate neutrality by 2050. Following the direction taken by the European Union, the Italian government, like all EU countries, expressed its commitment to curb global warming. The new "Proposed Integrated National Plan for Energy and the Climate" (PNIEC), published at the end of 2019, aims to chart a course that makes the national energy system more competitive, secure and sustainable, operating in line with the decarbonisation targets defined at a European level.

European and Italian targets for 2030 and 2050



Source: "Clean Energy for all Europeans"; "EU Climate Long-term Strategy 2050"; "PNIEC"

Among the scenarios taken into consideration by Snam and the studies conducted by organisations and companies that are experts in the energy sector, green gases, such as hydrogen and biomethane, are getting ready to be the key solutions supporting the national and international energy transition, being able to contribute, through their development and use, to achieving the challenging goals of reducing emissions in the long-term.

Snam's objectives

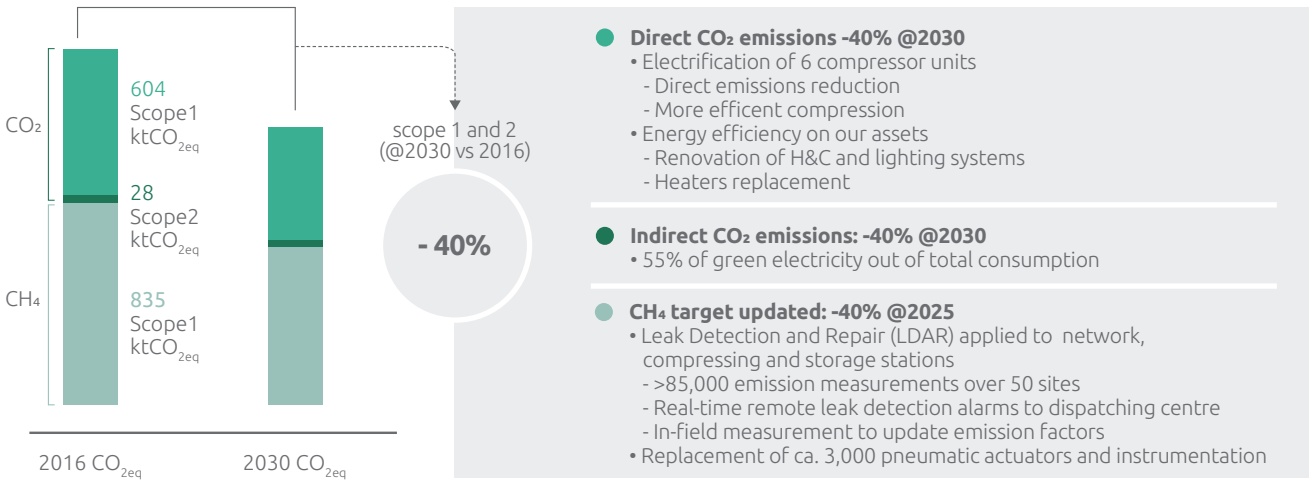
At the end of November 2019, Snam launched the new Strategic Plan for the period 2019-2023, which traces the route that will enable the Company to tackle the challenges associated with climate change and to contribute to the reduction of emissions, minimising the increase in the global temperature and cut down energy costs for end users. Snam believes in the potential of hydrogen as a clean energy source and takes the view that injecting it into the gas networks could contribute to the development of its production from renewable sources, keeping down costs.

Snam's sustainability activities and projects are aimed at reducing greenhouse gas emissions, in line with European and domestic decarbonisation goals.

Overall, Snam has set itself the target of reducing Scope 1 (direct) and Scope 2 (indirect) CO_2 equivalent emissions by 40% by 2030 (with a base of 2016), equal to around 1.5 million tonnes of CO_2 equivalent, to fight climate change in line with global objectives.
Specifically, Snam is committed to reducing its CH_4 emissions by 40% by 2025 (with a base of 2016) compared with the 25% target in the previous plan. This target will be achieved through the application of a campaign for identifying and repairing methane leaks (Leak Detection and Repair), the maximum replacement of network and power plant components and the adoption of the best technologies available.

In addition, Snam is committed to a 40% reduction in direct CO_2 emissions by 2030 thanks to the launch of the conversion of six gas-electric hybrid power plants which will also contribute to the flexibility of the electric system and to energy efficiency actions at buildings. To achieve the overall target of 40%, Snam also plans a 40% reduction by 2030 of CO_2 generated from electricity consumption thanks to greater recourse to solar power.

Snam's objectives in the 2019-2023 Strategic Plan



Source: Snam, 2019-2023 Strategic Plan

The first element

Hydrogen is a clean and versatile source of energy which, if generated from renewable energy and then transported, stored and used as a gas, does not generate emissions of carbon dioxide and other climate-changing gases, or emissions that are damaging to man and the environment. For this reason, it can assume a key role in energy transition and in guaranteeing that the European and global decarbonisation targets are reached by 2050.
Currently, it is mainly employed for industrial uses and is obtained from natural gas, through a thermo-chemical conversion process with the production of CO_2 (grey hydrogen). Added to this is the technology for capturing and storing the CO_2 (CCS) to obtain decarbonised hydrogen (blue hydrogen). However, the most promising route for the development of hydrogen is the production of **"green hydrogen"**, generated through **electrolysis of water**, in which electricity is used to "break down" the water into hydrogen and oxygen without the emission of any CO_2 at the point of release.

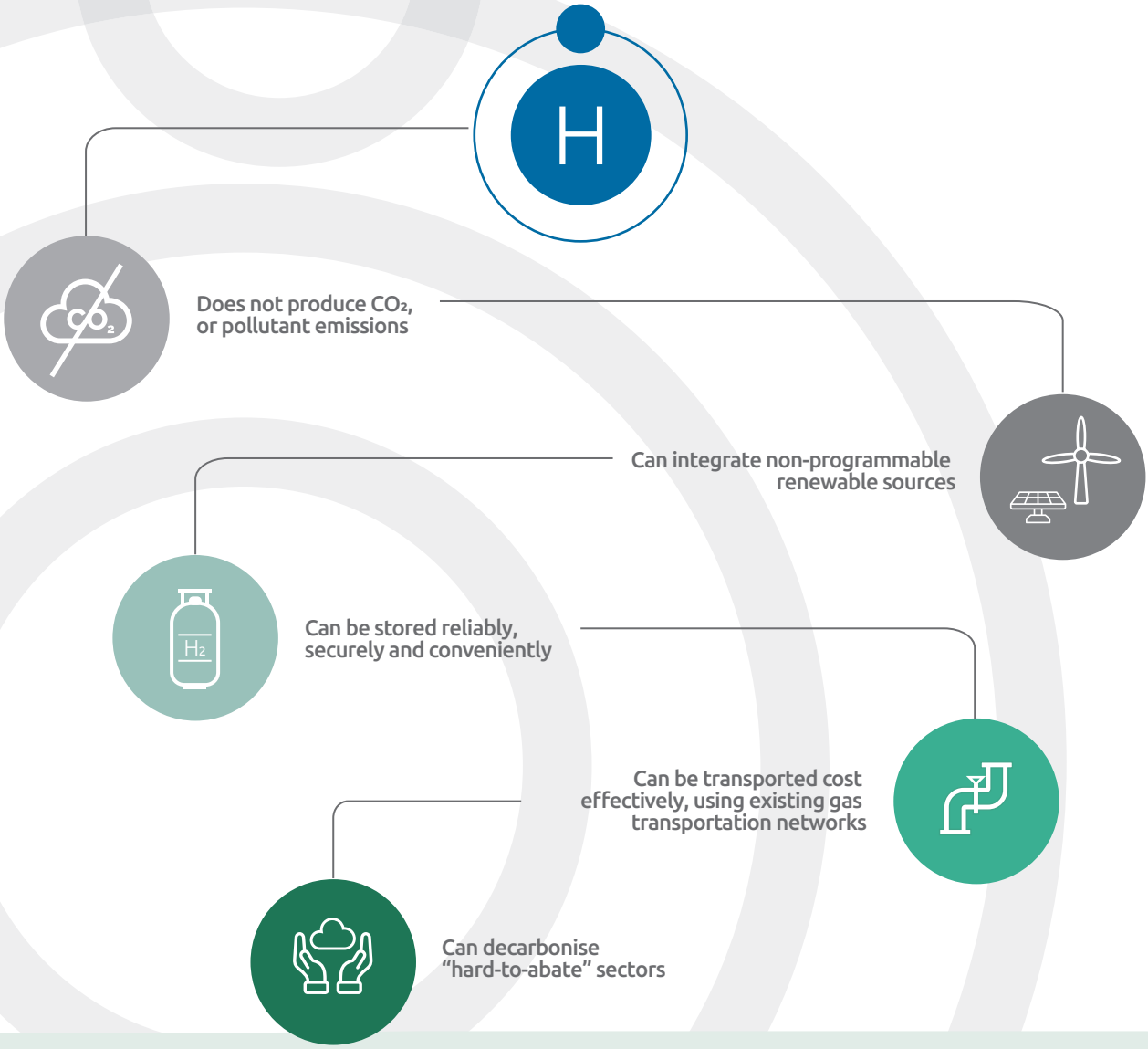
One of the main advantages of green hydrogen is related to its possible use to integrate the development of non-programmable energy sources, such as wind power and solar power. Specifically, the development of electricity in the national energy mix through non-programmable renewable sources will lead to the need to store energy to balance seasonal peaks in demand. Hydrogen, in a complementary manner to other forms of energy storage, like batteries and reservoirs, could contribute to the balancing of the supply of energy during the year, making it possible, for example to convert the energy produced in summer by photovoltaic plants and store it during the winter months. The possibility of converting energy from non-programmable renewable sources thereby reduces the country's dependency on specific energy resources and certain exporting countries, increasing energy security and economic advantages.
A key characteristic of hydrogen is therefore its capacity to act at the same time as a clean energy source and an energy vector for storage. Added to this is the fact that hydrogen, especially in countries where domestic energy demand is mainly covered using natural gas, can be transported through the existing pipelines, mixed with natural gas and, in the future, in dedicated pipelines. Specifically, in Italy, thanks to the gas infrastructures that connect it to North African countries, where there is plenty of sunshine throughout the year, hydrogen can be produced in great quantities in these countries and transported to Italy and Europe through the national gas network.

"Hard-to-abate" are the sectors with an intensive consumption of energy, for which the use of hydrogen could represent a crucial choice in the reduction of emissions

Achieving the goal of 100% decarbonisation by 2050 also requires a significant reduction in so-called hard-to-abate sectors, namely high energy consumption sectors with consequent high levels of greenhouse gas emissions, where the use of electricity has high costs or disadvantages of a technical nature. Technological progress in these sectors has led to minimal progress in terms of energy efficiency that are not enough to offset the high greenhouse gas emission levels. In this context, hydrogen could represent a unique solution because it could be stored and used in a similar way to other fossil fuels, leading to a reduction in the costs connected with the use of existing technologies and infrastructures and the zeroing of emissions.

Now costs remain the main obstacle related to the development of hydrogen, which are still too high to allow large scale production to become widespread. However, strong growth is expected in the supply of hydrogen on a global scale that will allow a significant reduction in costs, from the current over €100 per MWh to around €20 per MWh by 2050.

The main advantages of green hydrogen and main applications on hard-to-abate sectors



Aviation
In the aviation industry, in place of kerosene it is possible to use a zero emissions hydrogen and reused CO2 based synfuel (i.e. captured in a CCS [carbon capture and storage] plant).

Shipping
In sea transport, hydrogen can be used to produce ammonia, which can replace oil for ship's engines to run on.

Heavy transport
Hydrogen can enable long-range buses and lorries to become competitive in terms of costs compared with the vehicles running on diesel, electricity and LNG currently in use.

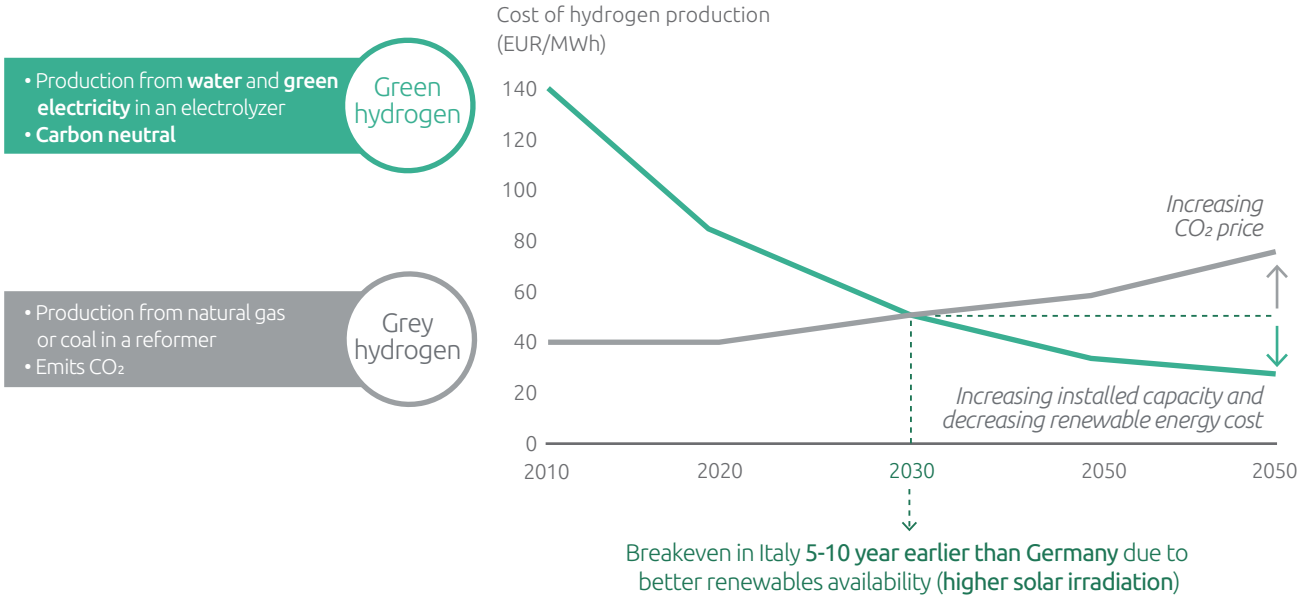
Chemical production
Grey hydrogen, produced from natural gas and used as a raw material in the refining of petro-chemical products and in the production of ammonia could be replaced by green hydrogen produced from renewable sources.

Metal production
The reduction of the mineral iron with hydrogen through the Direct Reduced Iron (DRI) process, replacing the reaction of the mineral with carbon in the blast furnace, represents one of the few zero carbon emissions alternatives for steel production.

Heating
The mixture of hydrogen in the gas transportation network can become a competitive way of decarbonising gas heating systems, especially in historic city centres.

Conversely, the production of grey hydrogen, produced from natural gas or coal, will see a rise in price resulting, above all, from the increase in the cost of CO_2, in line with European and Italian decarbonisation targets.
Specifically, in Italy, the cost of green hydrogen could already be competitive by 2030, ahead of other European countries. Taking into consideration the good availability of renewables in Italy, thanks to its geographical location and weather conditions (e.g. good direct sunlight), green hydrogen will reach parity with grey hydrogen 5-10 years earlier than in other European Union member states such as, for example, Germany.

Development of production costs for green hydrogen and grey hydrogen in Italy to 2050



Source: Snam, 2019, "The Hydrogen Challenge: The potential of hydrogen in Italy".

H2: inside the molecule

Hydrogen, the first element in the periodic table is the most abundant in the universe. It is a colourless, odourless gas present, in combination with other elements in compounds such as water, minerals, hydrocarbons and biological molecules. It is very light, exactly 16 times lighter than oxygen, can be stored, has a very high energy content per unit mass and can be easily reproduced from different energy sources, such as fossil fuels (grey hydrogen) and renewable energy sources (green hydrogen). The colours grey and green refer to the different production sources of hydrogen, respectively from natural gas or from oil and electricity from renewable sources.
Grey hydrogen is mainly produced from natural gas. The most common production process is called gas reforming which consists of getting water vapour and natural gas to react at high temperature. The consequent chemical reaction produces hydrogen and leads to the emission of CO_2 into the air, due to gas combustion for heating. The production of hydrogen with a low environmental impact from fossil fuels could only be achieved in combination with the capture, use (as an input for new hydrogen-based fuels) and storage of coal through the carbon capture, use and storage technique (CCS). This technique makes it possible to offset, in full or in part, the CO_2 emissions from its production. The hydrogen produced through the storage of coal is defined as blue hydrogen.
Green hydrogen is produced from the electrolysis of water, a process in which water is broken down into oxygen and hydrogen with zero emissions. Thanks to the electrolysis process, it is possible to produce hydrogen from electricity and vice versa. Hydrogen, like electricity, is an energy vector. What distinguishes hydrogen from electricity is the fact that it is composed of molecules and not electrons. This means that it can be stored and transported and, if combined with other elements, forms so-called hydrogen-based fuels (e.g. synthetic methane, ammonia) so that it can be used as an energy source for various productive uses.

Interview with

Mark Zoback

Mark Zoback is a geophysic professor and director of the "Stanford Natural Gas Initiative" at Standford University, he is also co- director of the "Stanford Center for Induced and Triggered Seismicity (SCITS)" and of the"Stanford Center for Carbon Storage (SCCS)". He is author to more than 300 articles and books, he also holds five patents and received several academic and institutional awards such as the'"Outstanding Contribution to the Public Understanding of the Geosciences Award" from the "American Geological Institute" in 2016.

Hydrogen technologies have experienced a great deal of interest in both academic research and commercial communities over the last few years, primarily as an option for deep decarbonization of the transportation and power sectors. While the applications and pathways to commercialization have more clarity (and promise) than in previous periods of interest in hydrogen, recent improvements in cost and performance point to economic viability. Hydrogen appears to be on the cusp of a step change in technology developments, cost reduction and especially public acceptance. It is also seeing relatively small-scale success in several markets such as fork lift trucks being used in indoor warehouses and home hydrogen fuel cells for electrical power back-up. In general, widespread utilization of hydrogen across many sectors suggests a potential for synergy and scaling.

Which role do you foresee for hydrogen as a fuel for the decarbonization of the current and future energy scenarios?
In the context of areas where hydrogen is able to uniquely fit as a critical energy source in a largely decarbonized energy world, heavy-duty transportation, primarily long-haul trucking, buses and potentially ferries/ships seems to stand out. For instance, in the context of heavy-duty transportation, hydrogen is particularly attractive because the refuelling time is significantly shorter than for electric trucks and the range of 300-500 miles it requires limited infrastructure to existing trucking routes. From a business perspective, the introduction of a fleet of heavy-duty vehicles will need to be coordinated with the build-out of refuelling infrastructure and with appropriate policy and regulatory reforms. Some sizeable, but limited applications (e.g., local port authorities utilizing large hydrogen fuel cell vehicles) will be an important early-market and a valuable proving-ground for eventual large-scale deployment of hydrogen-powered vehicles.
Another market sector that could see significant increases (pending technological developments and cost reduction) is as a back-up storage/distribution mechanism for curtailed renewable electricity (as an alternative to batteries) in the power sector. In this application, electrolyzers seem like the most practical source of hydrogen as it circumvents the need for carbon storage.

Development of this market will be dependent on the cost of hydrogen generation (principally the cost of electrolyzers) but also the development of local hydrogen storage facilities and, of course, electricity. Blending hydrogen into the existing natural gas pipeline infrastructure is extremely attractive as a low-cost option to help decarbonize the natural gas system, particularly for heating. There are concerns about the ability for the natural gas pipeline system to accommodate hydrogen, but many of these should be resolvable in a few years.

Which is the role that both the key players such as companies operating in the energy industry and the final customers can play in these scenarios?
Companies will need to demonstrate that required technologies are available for deployment and develop business models and markets. Thirteen large international corporations recently formed the Hydrogen Council to create alignment on the use of hydrogen for the energy transition. Companies, and governments for that matter, are at risk of burning billions of dollars in pursuit of widespread hydrogen implementation if it is not done in a systematic and integrated manner. Companies should be strategic in their vision for low-carbon hydrogen and focus investments in hydrogen in cases where other cheaper and more established technologies cannot be deployed. Hence, the emphasis on heavy-duty transportation discussed above. There is certainly a lot of hype about "the new hydrogen economy". It is somewhat reminiscent of the hype surrounding the internet. Yes, the internet has revolutionized commerce, entertainment, etc. but only after a period in which there were spectacular and costly failures such as when the dot-com bubble burst in the late 1990's.

How important is the technologic innovation and R&D for the development of hydrogen at scale?
Widespread use of hydrogen would greatly benefit from technological improvements and cost reductions associated with technologies (such as electrolyzers) that would be able to operate over a wide range of scales.

Can hydrogen play a key role in the growth of developing countries?
The use of hydrogen fuel cell vehicles in many of the mega-cities of the developing world would be of tremendous benefit. In densely populated areas, grid-based electricity principally comes from coal-fired power plants. It may be most reasonable to transition from coal to natural gas before renewable sources for power generation because of the scale at which electricity needs to be supplied in the megacities of the developing world. This said, a major issue affecting electrical power in the developing world is its unreliability. Hence, in much of the developing world, nearly all middle-to-upper class consumers and small businesses have back-up sources of electrical power – usually diesel-powered generators. While one could use much cleaner natural gas-powered generators, another option is to generate and store hydrogen through electrolysis and use fuel cells to deal with electrical power intermittency. However, this will require a substantial decrease in the capital cost of electrolyzers (as well as the overall system cost). If the system cost for hydrogen fuel cells is substantially more than diesel- or gas-fired generators, it may be difficult to establish this market in much of the developing world.

Snam and the hydrogen

Snam is strongly committed to energy transition, with investments of €1.4 billion planned for the Snamtec project (Tomorrow's Energy Company) intended to improve energy efficiency and curb emissions, as well as innovation and new green activities such as sustainable mobility and green gases, which come under the hydrogen research and development initiatives.
From a system perspective, Snam takes part in many institutional and association round table discussions dedicated to hydrogen nationally and internationally. In particular:

- in Italy, Snam is a member of the HS2IT association - the Italian Association of Hydrogen and Fuel Cells;
- in Europe, Snam joined the Hydrogen Initiative, a statement signed by businesses and governments to support hydrogen and its wide potential as a sustainable technology for the decarbonisation and long-term energy security of the European Union, and it belongs to the HYREADY network, which includes important European players committed to cooperate to make the existing transportation networks compatible with the injection of increasing percentages of hydrogen;
- globally, on 15 January 2020, Snam, together with the other 21 new members, officially joined The Hydrogen Council, an initiative launched in 2017 at the World Economic Forum in Davos to create a coalition of leading businesses in their respective sectors committed to accelerating investments in hydrogen.

Snam also collaborates with the Bruno Kessler Foundation, which carried out research into technologies intended to revolutionise the production of decarbonised hydrogen in the near future, making it an integral part of the long-term solution for a carbon neutral energy system.
To give shape to the results of the studies and research conducted nationally and internationally in the field of hydrogen, Snam has created a new business unit dedicated to hydrogen, with the goal of evaluating possible pilot projects and contributing to the development of the supply chain. Alongside this, studies will continue into the adaptation of compression and storage infrastructures and the role of hydrogen in the future energy system also with a view to collaboration between various sectors (sector coupling), such as, for example, electricity and gas.
Specifically, in April 2019, Snam trialled the introduction of a mixture of 5% hydrogen and natural gas into its transmission network, replicating the experiment in December, in the same section of the network, with 10% hydrogen. The trial, the first in Europe, took place successfully in Contursi Terme, in the Province of Salerno, and led to the supply, for around a month, of H2NG (a mixture of hydrogen and gas) to two industrial businesses in the area, a pasta making factory and a company that bottles mineral water. The initiative gained international attention, with dedicated articles by Bloomberg (which wrote it was the "first pasta" cooked with hydrogen) and in the Financial Times (which called it a historic milestone).

By applying the percentage of 10% hydrogen to the total gas transported annually by Snam, it would be possible to inject 7 billion cubic metres per year, a quantity equivalent to the annual consumption of 3 million households and this would enable a reduction of 5 million tonnes of carbon dioxide, corresponding to the total emissions of all cars in a region like Campania. Now, Snam is committed to checking that its assets are fully compatible with the increasing quantities of hydrogen mixed with natural gas, as well as to research into the production of hydrogen from renewable electricity.

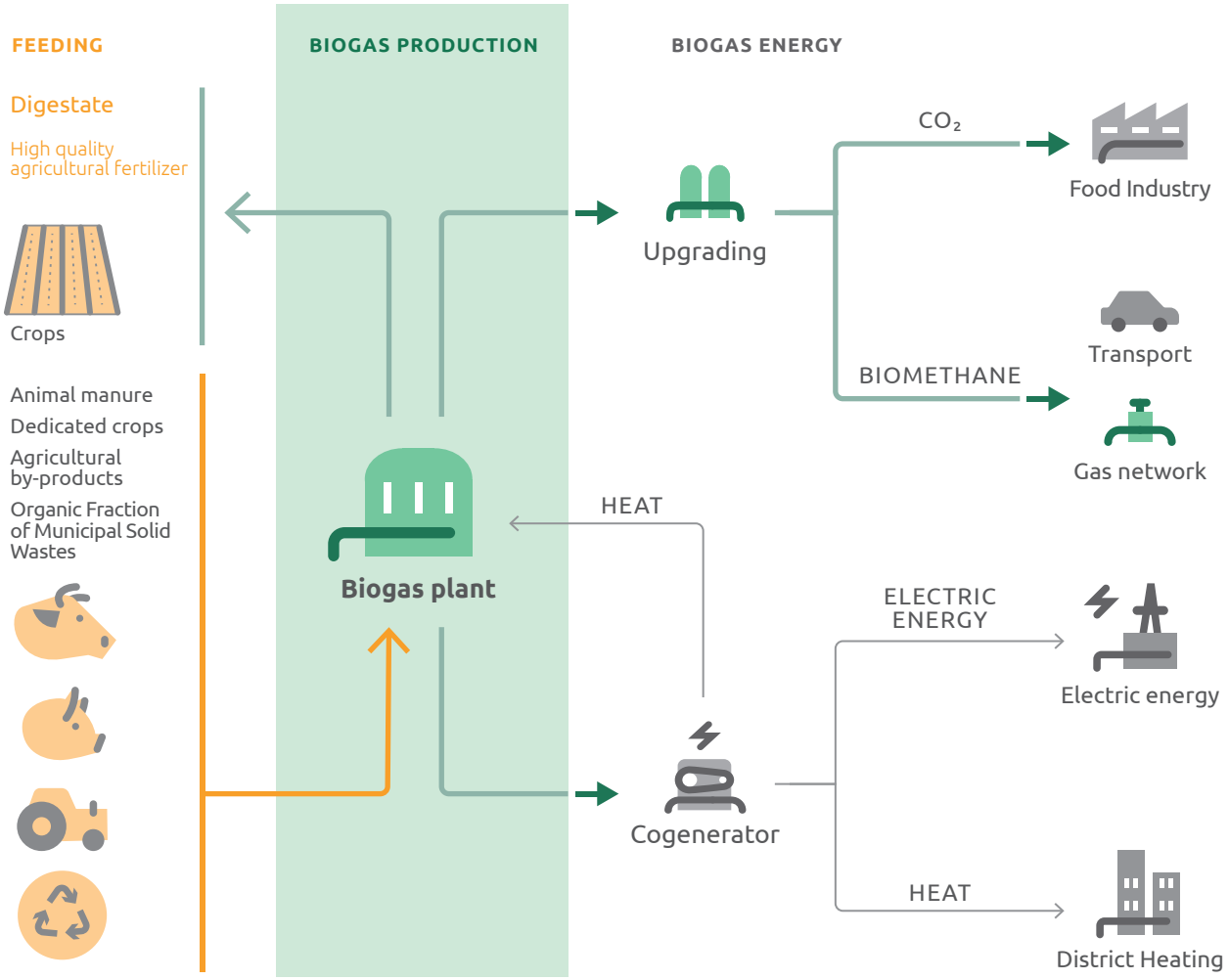
Green energy vectors

Looking at the current situation, there's an urgent need to intensify efforts to reach the European and national decarbonisation targets. An energy system where natural gas and energy vectors obtained from renewable sources coexist is presently the only possible solution for international, and especially national energy transition. For this reason, domestic and European policies are aligning themselves concerning the essential role of green gases as the solution for decarbonisation in the medium-long-term. Specifically, the combination of hydrogen, biomethane and alternative forms of gas storage and transportation (through Compressed Natural Gas and Liquefied Natural Gas) will make it possible to respond to the energy requirements of the most critical sectors, using the existing infrastructures and resources in Italy. Snam, in line with national energy strategies, is positioned as a vehicle for this transition, through research, investments and collaborations aimed at the development of green energy vectors in Italy.

The circularity of biomethane

Biomethane is a renewable, flexible, efficient and programmable source, can be transported in existing transportation and storage infrastructures, and integrates perfectly and in a totally complementary way with other renewable sources such as solar and wind power.
It is obtained, in dedicated facilities, from the anaerobic digestion of both agricultural sub-products (dedicated crops, agricultural sub-products and waste and animal waste), and agro-industrial sub-products (production waste from the food chain) and organic fraction of municipal solid waste (FORSU) through a biogas purification process.
Biomethane can already be injected into the existing infrastructure network and used in all sectors in which gas is employed to produce heat, electricity, or directly as a fuel in motor vehicles. Precisely as it is a renewable energy, on 2 March 2018, the Italian government issued a Ministerial Decree that incentivises the use of biomethane as a fuel for motor transport.

The biomethane production cycle



The biomethane has several benefits:

- It is the perfect example of a circular economy: both in agriculture, in the agro-industrial field, relating to the management of organic fraction of municipal solid waste (FORSU), the biomethane is produced from production waste and sub-products which once the anaerobic digestion process is completed are used as totally natural fertiliser capable of restoring the organic and nutrient substances needed from the perspective of a circular economy to the land;
- It is an efficient, flexible and programmable energy source: the presence of infrastructures like gas transportation and storage networks ensure that, unlike other renewable energies, once injected into the Snam network, the consumption of biomethane can be modulated according to requirements without additional investments;
- It is totally renewable and sustainable: biomethane, in spite of being a gas, is actually considered a neutral source from the perspective of greenhouse gas emissions and is totally renewable because its production takes place through the transformation of waste and organic material that would produce greenhouse gas emissions in any case.
  For biomethane from agricultural sources, it is recognised that carbon dioxide emissions produced during combustion are equal to the quantity of carbon dioxide absorbed by crops when they are growing, making the process neutral from the point of view of emissions. The process can go from "neutral" to "negative" if the carbon dioxide produced and separated during the biogas purification stage is employed in industrial and/or food uses. In addition, the production of biomethane is not competitive to the production of food and incentivising the use of particular "second harvest" energy cultures makes it possible to maintain an agricultural balance in the existing economy;
- It creates value for local communities: biomethane case be the source of a new local economy, creating jobs, increasing tax revenues for local communities, responding to the need to dispose of production waste and the organic fraction of municipal solid waste and, through special cultivation techniques, it combats the effects of desertification preserving and, sometimes, replenishing specific nutrients in the soil;
- It minimises the costs of decarbonisation: not requiring new investments in infrastructures and helping to exploit waste and sub-products, biomethane becomes a vital source for on focusing National and European objectives in terms of decarbonisation.

  A recent Ecofys study, promoted by the Gas for Climate association, which Snam is a part of, estimated that using renewable gas could lead to an overall saving in Europe of around €140 billion per year by 2050, compared with a scenario that doesn't involve the use of biomethane.

Biomethane is therefore an energy resource that is ready to meet European and global objectives for reducing emissions exploiting existing gas networks and promoting an economic model based on the sustainability and circularity of the use of resources, with consequent positive effects on the agri-food industry.

The Enersi project

In 2018 Snam launched an innovative project relating to the recovery of organic fraction of municipal solid waste. Through the subsidiary Snam4Mobility, for a price of around €2 million it acquired 100% of Enersi Sicilia Srl, the company that owns the licence authorisation for the development of a biomethane and compost production infrastructure in the province of Caltanissetta. The biomethane produced will be injected into the network as a source of renewable energy, while the compost will be used as a natural fertiliser in place of chemical fertiliser.

The works, which began in December 2018 and continued throughout 2019, will be concluded by the middle of 2020 with the introduction of biomethane into the national network.

The plant will be capable of recovering 36 thousand tonnes per year of FORSU corresponding to around 3.2 million cubic metres of biomethane, equal to 30 GWh of energy produced each year.

The main advantages for the territory from this project are:

- New jobs and skills;
- Economic return for local businesses that will be involved in the construction phase and in supporting and supplying the new plant;
- Cost Saving for the citizenship in the transportation of waste outside of the province and a consequent reduction in emissions.

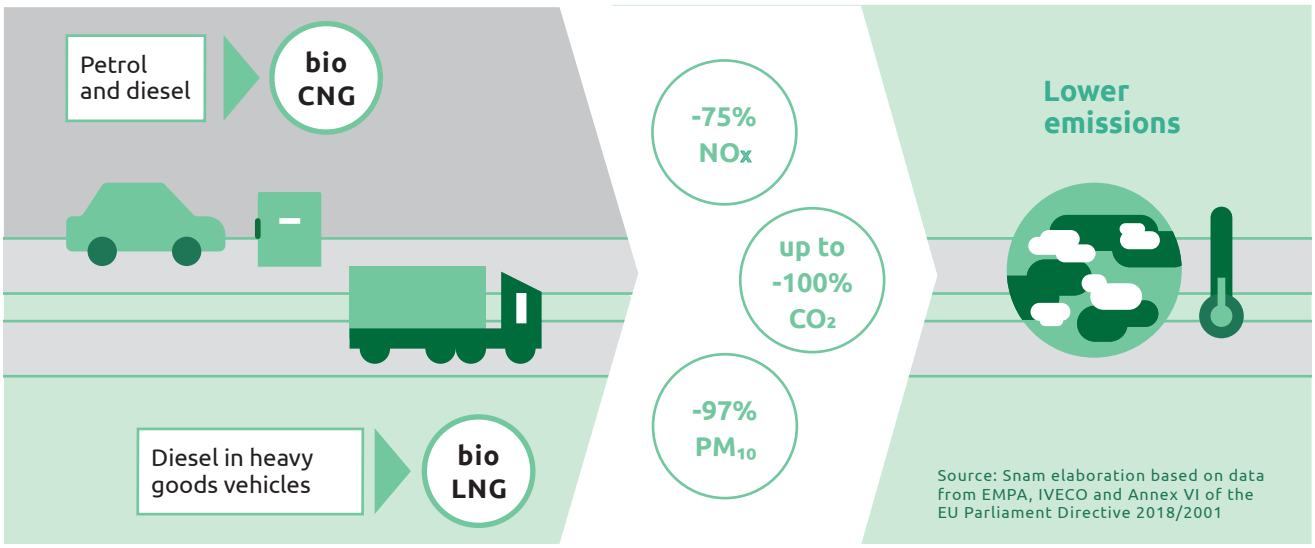
Managing the energy of the future: the sustainable mobility

The deployment of natural gas in the transport sector and the integration of biogas and biomethane will play a crucial role in supporting domestic economic growth and in combating climate change, in a process of rapid global transition towards decarbonised economies. The ease of transporting and storing natural gas allows the development of multiple projects linked to the widespread use of compressed natural gas (CNG) for motor transport and liquefied natural gas (LNG) used in heavy land and sea transport. In addition, biomethane can also be compressed, liquefied, transported and used like renewable fuel. Alongside the development of low emission fuels, the commitment outlined in its Strategic Plan means that Snam will upgrade the existing infrastructure in order to expand the network of natural gas refuelling stations. This objective will also be achieved through targeted partnerships with other sector players, such as the acquisition of Cubogas, involved in the business of natural gas compressors for sustainable mobility.

COMPRESSED NATURAL GAS (CNG) FOR MOTOR TRANSPORT: AN EFFECTIVE RESPONSE TO TRANSPORT GENERATED POLLUTION

The natural gas transported in the Snam network can be compressed and used as an alternative to traditional fossil fuels for cars, lorries and buses.
The use of CNG instead of petrol and diesel has significant environmental advantages: compared with traditional fuels, CNG allows the reduction of CO_2 emissions by around 20% (and up 100% if from biomethane), nitrogen oxides by around 75% and fine particles by 97%. Strengthened by its extensive pipeline network, which allows the transportation of CNG with little impact on the environment and vehicular traffic, Italy is already the market leader in Europe for the consumption of methane for motor traffic, with over a billion cubic metres consumed in 2019 and around one million vehicles currently in circulation.
During the year, Snam ratified agreements and partnerships with the aim of promoting sustainable mobility throughout the country.
In 2019, Snam and the Spanish motor manufacturer SEAT worked together since the agreement signed in 2018 for the technological development and expansion of compressed natural gas and biogas refuelling infrastructure for sustainable development. This partnership involved Snam's commitment to creating innovative infrastructures and the development, by SEAT, of new models of vehicles running on methane. The companies worked on development opportunities for initiatives aimed at retailers, commercial customers and motorists to promote the network of natural gas refuelling stations and identify initiatives for the technological development of biomethane. Specifically, commissioned by the competent Ministries, Snam produced a web tutorial for the implementation of the self-service facilities dedicated to natural gas for motor transport.
This new partnership will develop further the sustainable mobility with natural gas and biomethane, both in Italy and throughout the continent, because it joins together two European leaders: Snam in the creation of innovative infrastructures and SEAT in the development of new sustainable models.
As part of the promotion of sustainable development in Italy, in 2019 Snam upgraded the existing infrastructure in readiness for the development of the CNG and LNG markets.

Alternative to traditional fuels: bio CNG and bio LNG



Source: Snam elaboration based on data from EMPA, IVECO and Annex VI of the EU Parliament Directive 2018/2001

In order to expand the network of refuelling stations for vehicles running on natural gas, in 2019 the Company concluded an agreement with the IP Group for 25 roadside and motorway stations. Through its subsidiary Snam4Mobility, since 2017 it has signed agreements with various counterparties for the development of more than 100 refuelling stations, 11 of which are for LNG with compression systems for gas produced by the subsidiary Cubogas. Snam's goal is to create over 250 new distributors on a national scale, which will be part of the network already developed in Italy, to better balance the deployment in the different regions of the country.

The conversion of the company's fleet of vehicles to natural gas continued, increasing the number of new vehicles running on methane in 2019 by more than 360 (out of a total of 520 compared with 142 in 2018) in preference to diesel vehicles.

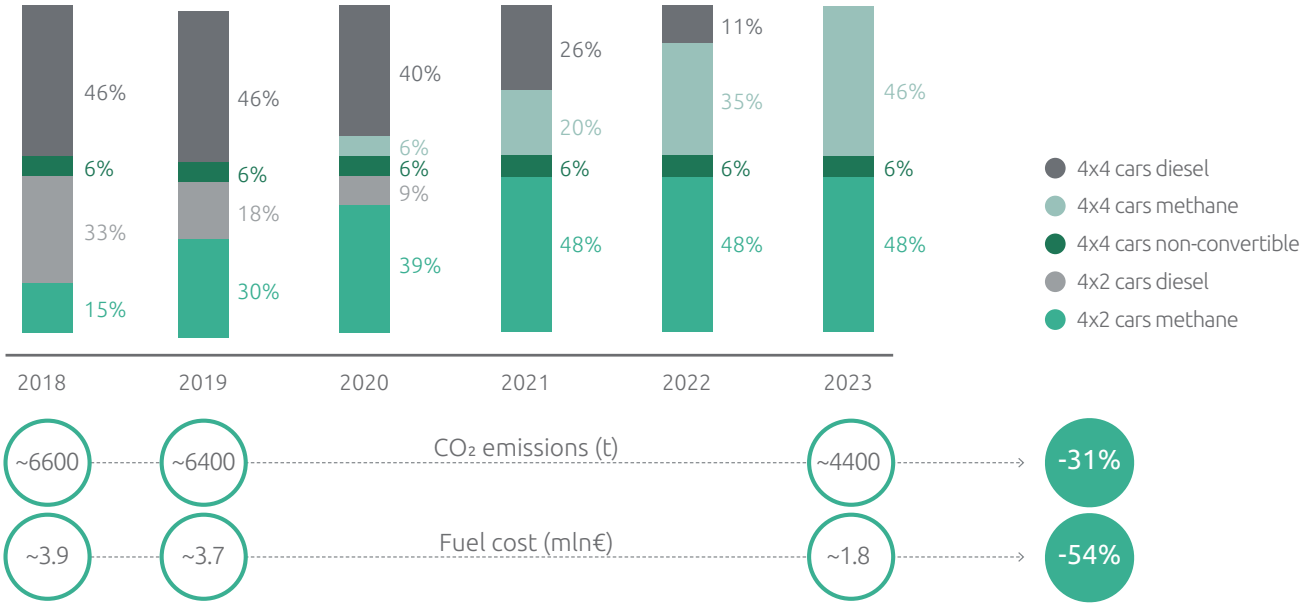
All motor vehicles purchased are defined as monofuel, which means that the petrol tank is extremely small, with a capacity of only 9 litres. This was an important tool in the daily use of methane, in preference to petrol.

In addition, a small refuelling station was installed by the subsidiary Cubogas in 2019 with a compressor for the company's methane vehicles at Snam's headquarters in San Donato Milanese and many more will follow at other company premises throughout Italy. This compressor comes under the category of domestic systems, that allow the refuelling of vehicles directly, at home or at work. It involves reasonably small systems that are simple to install, that can be adapted to the low-pressure domestic gas network or the 220w electricity grid and are therefore ideal for refuelling the fleets of companies or small municipalities.

In 2019, Snam introduced

360 methane powered cars to its company fleet, to replace diesel ones

Expected development of cars in circulation



Source: Snam, 2019, "The Hydrogen Challenge: The potential of hydrogen in Italy".

LIQUEFIED NATURAL GAS (LNG): A SOLUTION FOR REDUCING MARITIME AND HEAVY TRANSPORT EMISSIONS

LNG is produced from natural gas that is cooled and compressed until it reaches a liquid state. In this form the gas can be easily stored and transported, and importing it by sea allows for further diversification of procurement sources, with positive effects on national energy security.
LNG can be consumed in traditional systems or as an alternative to other fossil fuels for motor transport, rail transport or sea transport, replacing diesel, fuel oil or marine diesel.
The use of LNG instead of diesel has significant environmental advantages with a considerable reduction in emissions both in terms of climate altering gases and local pollutants, especially in the case of the use of LNG from methane produced from renewable sources. Specifically, the use of liquefied natural gas allows a reduction in emissions of fine particles (-97%), nitrogen oxides (-75%) and CO_2 (up to 100% in the case of the use of BioLNG).
For these reasons, in 2019 Snam developed numerous initiatives with its partners for the development of small scale infrastructures with the aim of promoting the production and distribution of liquid natural gas to advocate sustainable mobility for ship, lorry and train transportation. Specifically, Snam completed the upgrading of the Panigaglia terminal in order to allow the unloading of lorries for the distribution of LNG and developed further activities concerning micro-liquefaction plants. These activities come under the principles described in the DAFI (Law 257/2016) in order to develop and increase the use of alternative fuels throughout Italy).
In 2019 Snam also signed a Memorandum of Understanding with the FS Foundation and HITACHI for research into and the operational implementation of the first LNG train in Italy. This collaboration is the result of the desire of 3 companies to also transform the railway industry (traditionally electric or diesel) into a new "customer" for methane also promoting the use of green fuels to replace diesel. The end of the project is the first inaugural journey on the tourist lines run by the FS Foundation expected to take place by the end of 2020 after the conversion of the diesel engines and tanks to liquefied natural gas.

Green innovation

Snam is responding with an increase in activities and investments aimed at achieving the decarbonisation goals. Investments are continuing in Snamtec, the programme that combines all activities in the field of energy efficiency, technological innovation and energy transition which, in 2019, rose to €1.4 billion. Specifically, Snam plans to double investments in the new businesses for energy transition to at least €400 million, compared with the figure of €200 million in the previous plan.

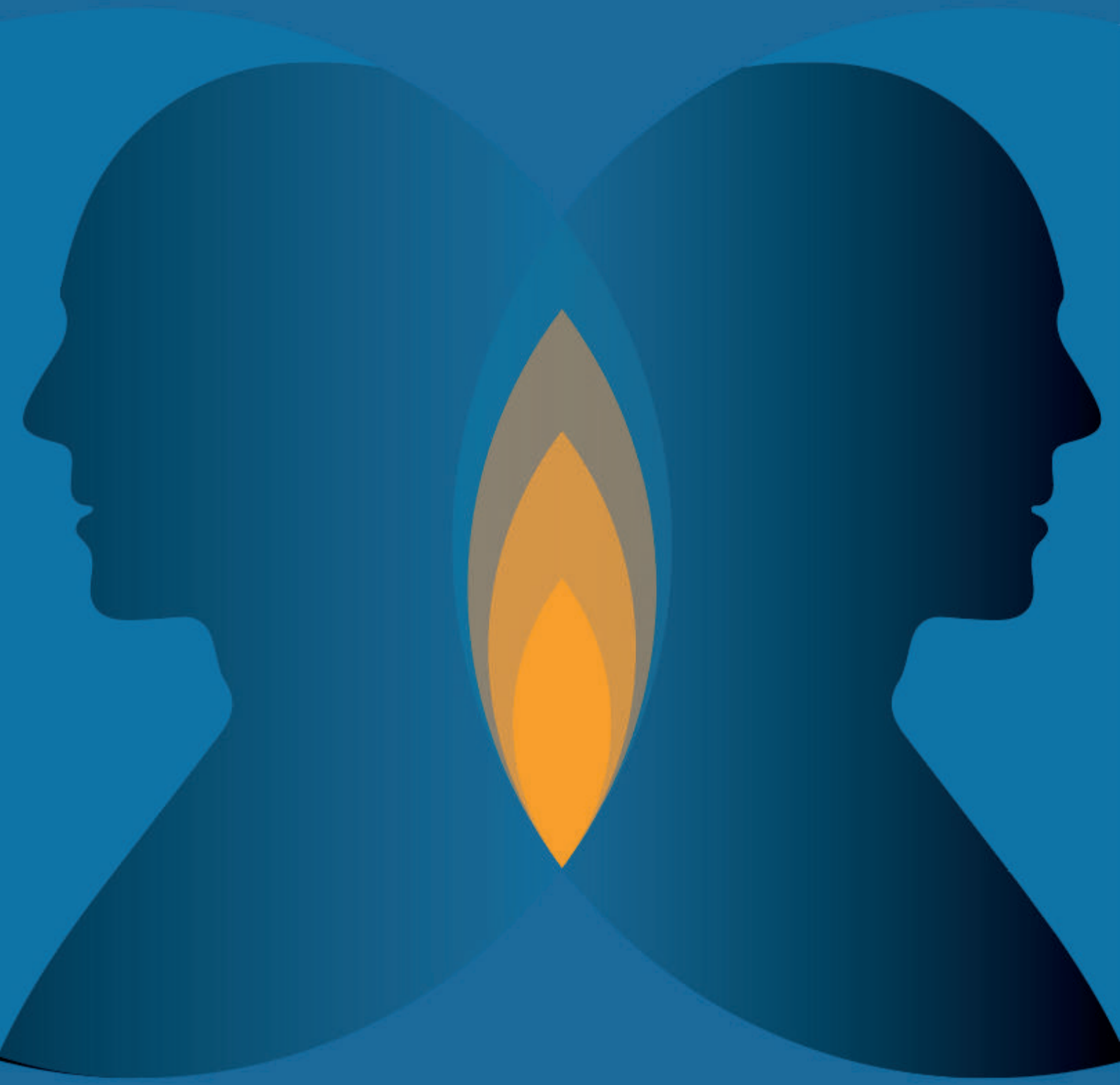
The most significant increase involves the sector of biomethane from organic waste, agricultural and agro-industrial waste, which will play a strategic role in the journey to decarbonisation, especially in the sector of sustainable mobility. Following the Italian government's decision to incentivise 1.1 billion cubic metres of biomethane for mobility, and the long-term potential of up to 12 billion cubic metres of biomethane by 2040 identified in the Snam-Terna scenarios, there is now a significant interest in this business. Snam aims to support and accelerate the development of the Italian market also by investing, through its subsidiaries, in infrastructure and in the construction of plants.

Snam has plans to invest around €250 million compared with the €100 million in the previous plan to build plants with an installed capacity of more than 40 Megawatt. Snam developed the following initiatives in 2019 with this in mind:

- through the new subsidiary Snam 4 Environment, it acquired from Ladurner Ambiente and from AB Invest a stake of around 83% in Renerwaste, one of the largest companies operating in Italy in biogas and biomethane infrastructures, for an outlay at the closing, including the repayment of the shareholders' loan, of around €46 million. This acquisition enabled Snam to have an operational base of facilities, several key senior figures for the development of the business and the necessary requirements to participate in future public-private partner initiatives. The scope of this operation includes three project companies (SPV) that are already operational, two of which own biogas facilities for cogeneration, with a total supply of around 130 thousand tonnes per year of FORSU (Ecoprogetto Milano and Ecoprogetto Tortona) and the owner of a municipal solid waste treatment plant (RSU) with a total capacity of 75 thousand tonnes per year (Renerwaste Lodi);
- it signed a Memorandum Of Understanding with the Infore Environmental Group, an environmental services company listed on the Shanghai Stock Exchange and the controlling shareholder of Ladurner Ambiente, for potential joint initiatives for the development of biogas and biomethane infrastructure in China;
- it signed a binding letter of intent aimed at negotiating and defining agreements to launch a strategic partnership in infrastructure for biomethane from agriculture through the entry, with a 50% stake, into Iniziative Biometano, a company operating in Italy with five biogas plants, for which there is a plan for conversion to biomethane, and with various plants in the process of authorisation or construction.

Not requiring new investments in infrastructures and helping to exploit waste and sub-products, biomethane becomes a vital source for focusing national and European objectives i terms of decarbonisation.

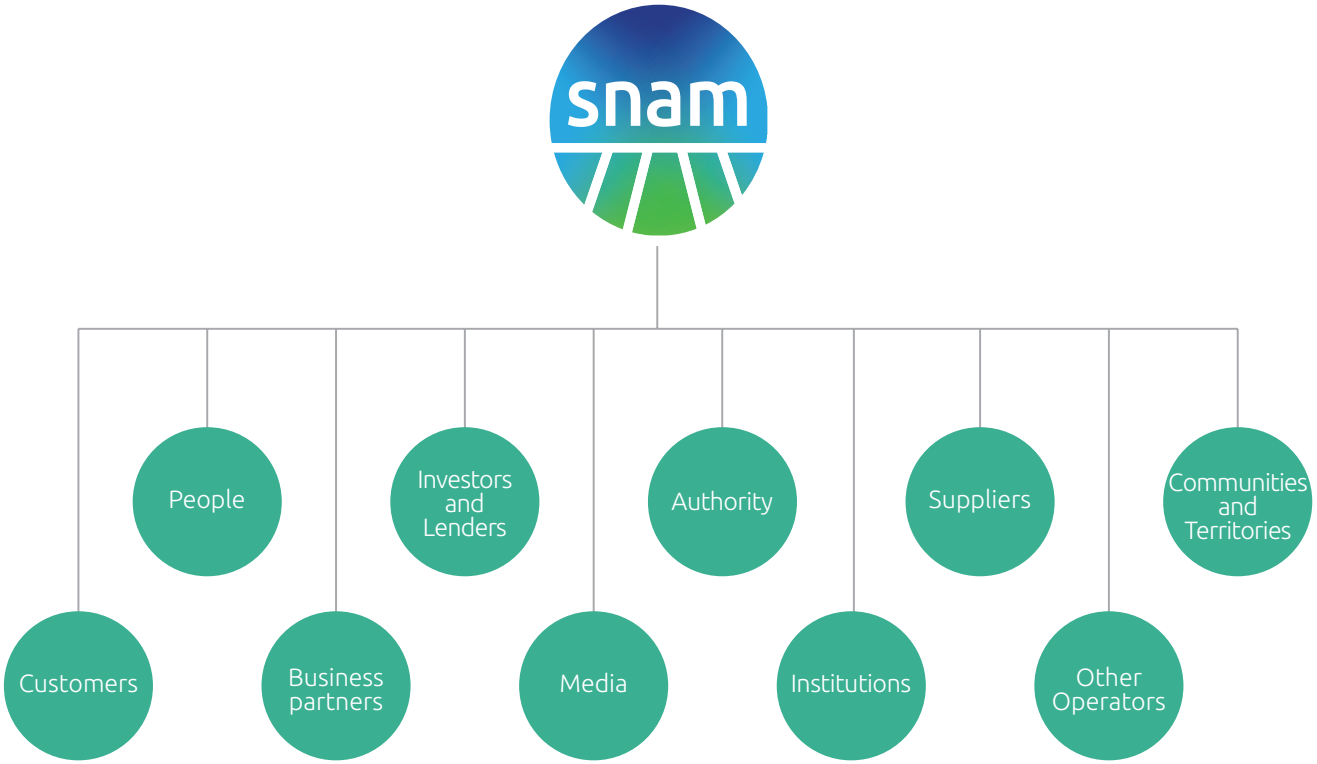
Stakeholder relationships



The stakeholder engagement

Snam promotes a constant dialogue with its stakeholders through proactive and multichannel communication with the aim of developing solid, lasting relations. In 2019, the stakeholder engagement activities mirrored the company's commitment on the energy transition front, reinforcing sustainable growth in a market that is increasingly focusing on decarbonisation processes. Specifically, supporting the development of new businesses, from energy efficiency to green gases, has taken on a key role in interactions and relations with stakeholders.

Snam's Stakeholders



THE MAIN EVENTS

Snam has organised and taken part in many events in order to strengthen and disseminate its all-round knowledge of the Group's companies, especially in a period of continuous development where the Company is renewing itself and expanding into new businesses to support energy transition.

Energy transition

One of the most important events in 2019 in which many Snam's stakeholders took part was **"The Hydrogen Challenge - 2019 Global ESG Conference"**, at Lanterna di Fuksas in Rome, focused on the potential of hydrogen as a clean energy vector on the journey to national and international decarbonisation. The conference, sponsored by the Ministry of Foreign Affairs and "Cooperazione Internazionale" and the National Research Council (CNR), featured a speech by the Prime Minister, Giuseppe Conte and was attended by numerous international guests. During the first day, agreements were signed with the Israel Innovation Authority and with the CNR on innovation and sustainable energy. The second day, in conjunction with the World Economic Forum, was dedicated to interactive round table discussions between international experts on the development of technological solutions for a sustainable hydrogen economy.
As part of this event, Snam, in collaboration with the Luiss University, also promoted a permanent monitoring centre aimed at the integration of ESG issues in the business strategy.
Together with Cassa Depositi e Prestiti and Terna, Snam organised the first edition of the **"Stati Generali della Transizione Energetica Italiana"** (General States of the Italian Energy Transition, an event dedicated to the future of the Italian energy system featuring numerous institutions and sponsored by the Prime Minister's Office and the Ministry of Economic Development. During this event, the various participants had to the opportunity to stress the importance of "sustainable" development of infrastructures supporting the country's future energy transition.

Technological innovation

Snam was among the protagonists of the 23rd edition of **Ecomondo**, the event in Rimini on technological innovation and sustainable development. Snam staged its Green Village, a pavilion composed of four islands dedicated to energy efficiency, biomethane, sustainable mobility and innovative forms of gas storage and compression. Snam brought its innovation expertise to **Digital Week**, the event promoted by the Municipality of Milan to discuss all aspects of digital transformation. During the event, the Company had the opportunity to meet stakeholders of the digital ecosystem and start ups, describing its technological development and digitalisation journey.

Protecting the environment

Snam has been developing positive experiences with Italian parks through the **"Sentieri Sostenibili"** (Sustainable Paths) editorial initiative for many years, in which Snam chronicles its commitment to environmental protection and the adoption of virtuous best practices which have always been a part of the Company's way of operating when creating infrastructures. The fifth edition added to the series is on the Foreste Casentinesi National Park and was presented at the literary and cultural festival "Fuori conTesto" with Fabio Genovesi, the Strega Giovani Prize winner. The park, recently recognised by UNESCO as a World Heritage Site, stretches between the Tuscany and Romagna regions with two parallel pipelines which are part of the transportation backbone taking gas from North Africa to Italy passing briefly through it. The story of the park and its geographical, natural, historical and cultural features is intertwined with the operational efforts made by Snam in an area of value which enables infrastructures that are vital for the country's energy requirements to coexist with the environment and ecosystems.

SNAM AND THE EU ENERGY TRANSITION

The initiatives and activities carried out by Snam in Europe are aimed at promoting the use of gas as a tool to guarantee the security of the energy system in Europe thanks to the diversification of procurement sources and routes and to support the development of new forms of renewable gases such as biomethane and hydrogen.
In 2019, Snam, courtesy of its role as representing the interests of the entire gas supply chain through GasNaturally, took part in the European discussions and round tables on energy, climate, mobility and sustainable finance, promoting the use of gas as the ideal energy solution for achieving future climate targets and supporting the European Union in its climate neutrality strategy by 2050.
Work continued under the scope of the "Gas for Climate" consortium, created in 2017 and composed of 9 European TSOs (Enagás, Energinet, Fluxys, Gasunie, GRTgaz, ONTRAS, Open Grid Europe, Snam and Teréga) and 2 associations operating in the sector of renewable gas (Consorzio Italiano Biogas and European Biogas Association). In 2019 the consortium promoted the results of a study, commissioned by Navigant, which highlights the opportunities for European citizens to achieve annual savings of around €217 billion by 2050 using the existing gas structure for the development of biomethane and green hydrogen.
Snam continued its activities with the European association "Natural & bio Gas Vehicle Association" (NGVA Europe) with the goal of promoting the use of natural gas and biomethane as alternative energy sources for sustainable mobility, both land and sea.
Lastly, being part of the Hydrogen Europe and The Hydrogen Council associations, Snam strives to promote hydrogen as an energy source that is sustainable and compatible with the existing gas infrastructure. In addition, as a member of the World Energy Council, Snam is one of the founders of the Hydrogen Global Charter, a shared platform open to all stakeholders, from institutions to businesses, aimed at promoting the large-scale development of hydrogen.

THE MEDIA: PRIZES AND AWARDS

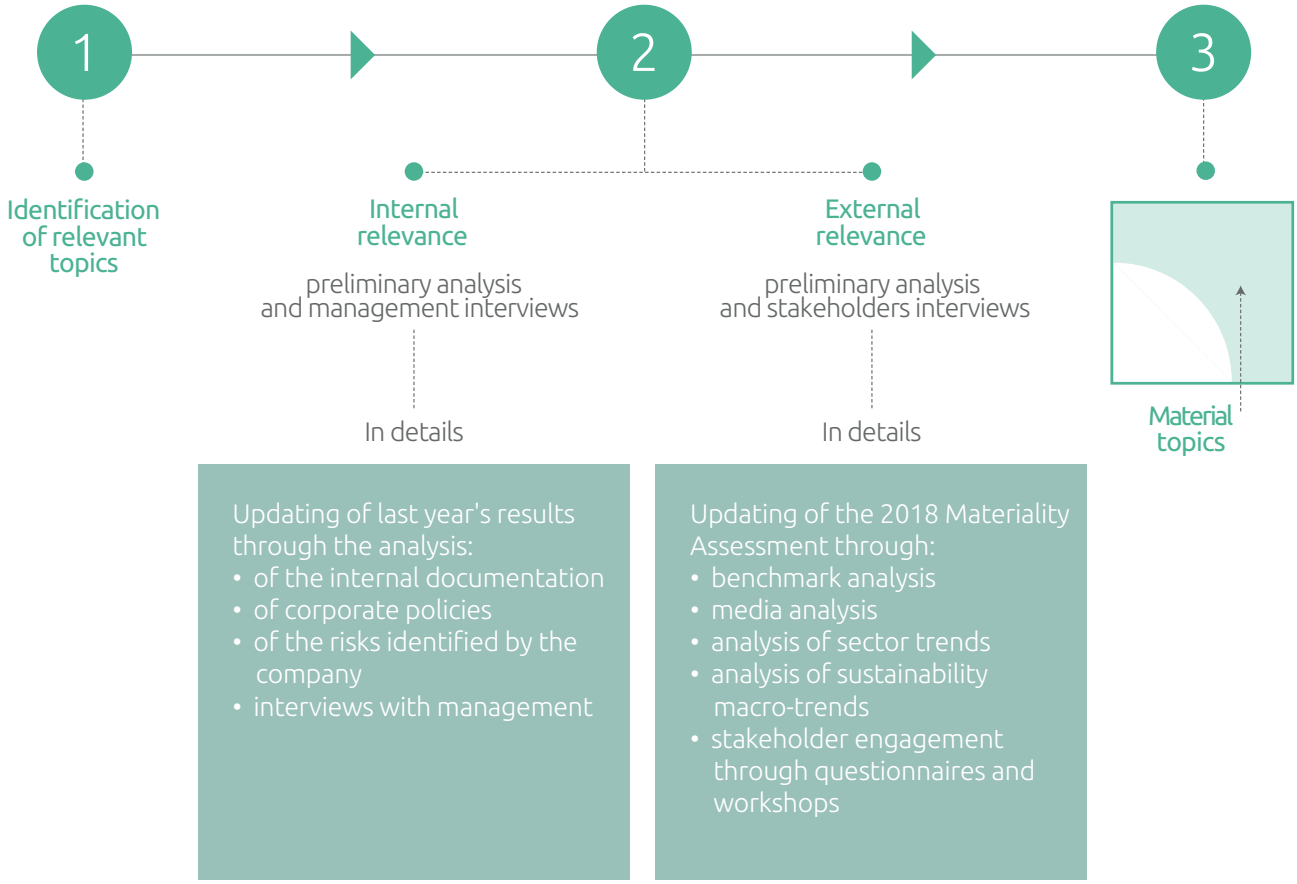
Thanks to a growing audience reached through social media and the corporate website and constant communication with media outlets, Snam confirmed its commitment once again in 2019 to communicate proactively and transparently with all its stakeholders. For the sixth year running Snam was among the leading Italian companies for digital communication in the Italian Webranking, standing out for its transparency. The 2019 survey involved 112 companies and Snam took second place with a score of 91.3 out of 100 confirming its excellence.
During the year, Snam's communication was directed at strengthening the position of the company about the **energy transition** and **decarbonisation**, highlighting initiatives and projects relating to the new businesses, with a special focus on hydrogen and the leadership potential of Snam and Italy in its development.
Alongside this, dialogue with the areas involved in the main projects continued and increased. By virtue of this undertaking, Snam's visibility in the media increased, as well as the publication of news on its platforms. Specifically, Snam recorded an increasingly more obvious presence in international media with exposure on issues of global interest, first and foremost energy transition. In addition, the international research organisation ".future" placed Snam among the best companies (Gold Class) for digital communication on sustainability.
As far as social activities are concerned, in 2019 Snam won the "Best employer brand" award on LinkedIn award that confirms how digital platforms, specifically LinkedIn, represent a strategic tool for the company to make themselves known by possible candidates and get in touch with them. Snam's presence in the Forbes "Top Employers" international classification is evidence of the growing reputation of the brand. Based on this study, taking into consideration 1.4 million interviews conducted globally and regionally, the company is one of only two Italian organisations among the top 150 in the world to work in.

Membership of the Un Zero Coalition

At the UN Climate Action Summit, which was held in September 2019 in New York, Snam joined the Zero Coalition, an alliance of the main global businesses and associations involved in the maritime, energy, finance and infrastructure sectors, aimed at the decarbonisation of shipping. From this perspective, the members of the coalition are committed to promote the adoption of zero emission ships by 2030 and advocate the development of clean energy sources. In line with this vision, Snam is strongly committed to initiatives for sustainable transport by road, rail and sea, promoting the use of biomethane and BioLNG, as well as the development of hydrogen.

The Materiality analysis

Every year Snam updates its materiality analysis in order to collect materiality issues or issues capable of reflecting the significant economic, environmental and social impacts of the company or which can substantially affect the evaluations and decisions of stakeholders.
The Global Reporting Initiative (GRI) and the International Integrated Reporting Committee (IIRC) have repeatedly proposed materiality, and the analysis thereof, as a starting point necessary to bring reporting in line with stakeholder expectations. In this sense, Directive 2014/95/EU implemented in Italy through Legislative Decree 254/2016, requires entities/companies, coming under the scope of the decree to apply this principle.
Starting with the important issues that emerged last year, Snam has updated its materiality analysis by reworking the analysis of the sustainability context and scenario and repeating the prioritisation of issues for the organisation and its stakeholders. The directions provided by the Sustainability Accounting Standards Board (SASB), for the Extractives & Minerals Processing: Oil & Gas midstream" were taken into consideration in defining the important issues.



The prioritisation of issues from the company's perspective was carried out through **interviews with the management**. On the other hand, to define the most important issues from an external point of view, **online surveys** were conducted with all categories of stakeholders and **specific workshops** dedicated to employees, customers and suppliers were held. The following categories of stakeholders were considered for the online survey: Communities and local areas, Investors and lenders, Other operators, Media, Suppliers, Customers, People (Employees), Authorities and Institutions.

The involvement of Stakeholders

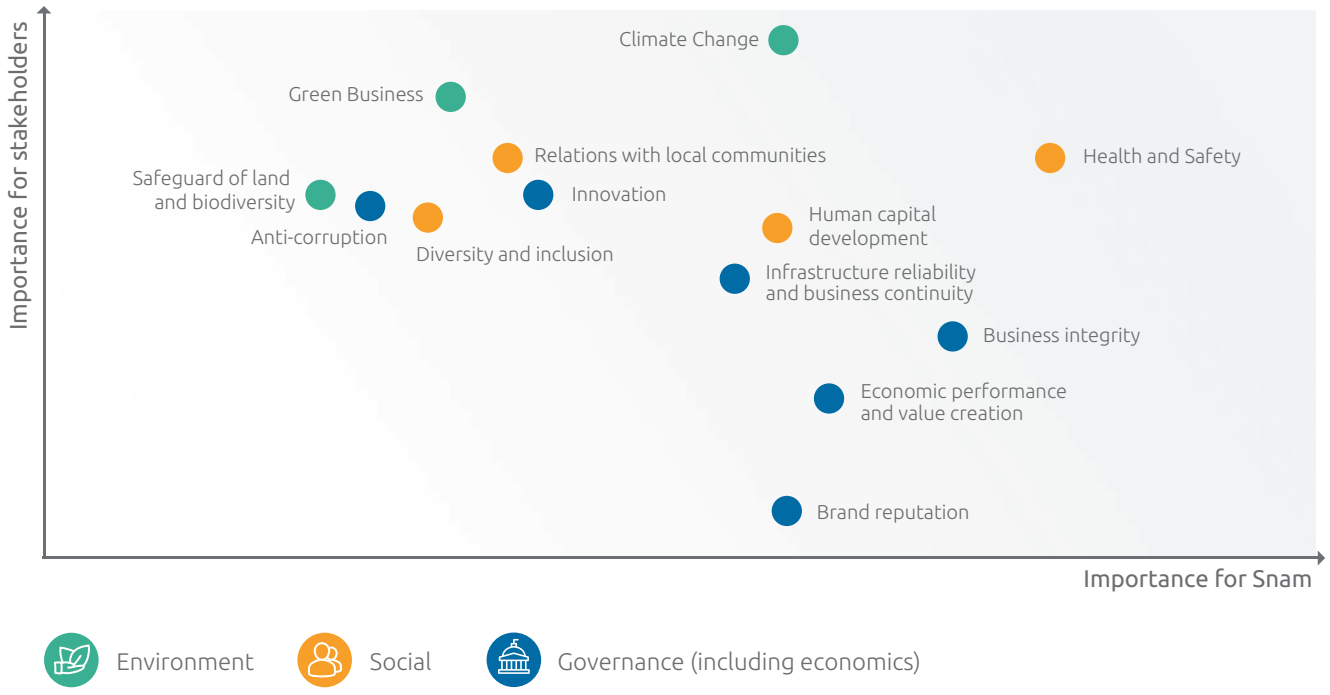
3 workshops organised for a total of **68 participants**

5,460 online questionnaires sent with a **participation rate of 39%**

To get to know the point of view of its stakeholders directly, Snam conducted several workshops involving representatives from **customers, suppliers and employees**. During the meetings, after an introduction on Snam's position on the issue of sustainability, this was followed by a brief induction on the concept of "materiality" and the analyses conducted to identify the relevant issues. Later on, the stakeholders were asked to validate the universe of issues and prioritise the themes by filling in a **hard copy and online questionnaire**. The results of the workshop, together with the preliminary analyses described above (trend, sector and benchmark), have made it possible to determine the external relevance of the sustainability issues.
This activity met with a very positive final judgement by the participants, who appreciated the involvement method and the issues discussed.

The joint analysis of the internal and external relevance led to the identification of the priority and materiality areas. The materiality matrix has been validated by the management, the ESG Committee and the CEO.

Materiality Matrix



Description of material issues

Reliability of infrastructures and business continuity	Ensuring the reliability of its infrastructures and services in order to prevent and/or mitigate potential situations that could compromise the continuity of the business (e.g. emergencies, cyber attacks).
Climate change	Promoting strategies to curb climate change, in order to reduce greenhouse gases and environmental impact, develop energy efficiency initiatives in Group plants and sites and promote a more sustainable business through the use and production of energy from renewable sources.
Diversity & Inclusion	Promoting and ensuring equal opportunities for all the employees and safeguarding diversity (race, religion, culture, gender and age) promoting dialogue and collaboration initiatives.
Business integrity	Carrying out activities fairly and correctly in compliance with the law, regulations, corporate recommendations and provisions and guaranteeing the efficiency of corporate governance, with special attention to issues of remuneration and balanced participation in the main corporate governance bodies.
Innovation	Searching for new technologies with a view to ever increasing efficiency in conducting business and reducing the impact on the environment.
Fighting corruption	Adopting preventive safeguards and targeted policies, as well as promoting partnerships that have the goal of fighting corruption and offences in general and also the dissemination of a culture of lawfulness.
Green Businesses	Integrating new businesses involved in the processes of decarbonisation in its operations supporting a low-carbon economy, such as biomethane, hydrogen, the use of gas for sustainable mobility (CNG, LNG) and new technologies capable of incorporating renewable energy from the environment.
Economic performance and creation of value	Promoting the creation of shared value in the medium-long-term for all categories of stakeholders, through operational and financial efficiency and committing to the development of business activities capable of generating value for all stakeholders.

Relations with local communities	Involving local communities in order to develop projects capable of responding effectively to the expectations of stakeholders and which also reinforce the licence to operate.
Brand reputation	Developing and protecting the brand and image through constant relations mainly with the financial community and investors (for example, disclosing transparent, exhaustive and timely information capable of representing the Company and its business).
Health and safety	Adopting management practices and systems to safeguard the health and safety of employees and third parties involved in corporate activities (e.g. suppliers).
Developing and safeguarding human capital	Encouraging professional development and attraction and retention of talent policies, enhancing the technical, managerial and organisational expertise of employees and promoting the work/life balance of staff including through welfare initiatives.
Protecting the local area and biodiversity	Protecting the landscape heritage of local areas where there are Group plants or sites and safeguarding the environment through policies for protecting the soil, subsoil and water table during operations.

The analyses described above also made it possible to identify further issues which, although not material, are, however, relevant for Snam or its stakeholders. Therefore, these issues are also monitored and overseen by the Company:

- **Waste management:** efficient management of waste including through the effective management of the disposal of materials used during production activities and the construction of Group infrastructures;
- **Management of water resources:** consumption and management of water resources in Group activities and policies and practices capable of encouraging the responsible use of water promoting reuse plans and actions;
- **Employment:** stable, continuous employment guaranteeing a good work environment and generational turnover in line with the development of the business;
- **Relations with the authorities and quality of services:** secure service, reliable over a period of time, in compliance with the principles of competition and equal treatment and access to infrastructures, as well as constructive relations with the regulatory authorities and with institutions, in order to develop satisfactory services for customers and at the same time directed at market needs and requirements;
- **Supply chain:** adopting policies for the selection of suppliers, contractors and partners that include the integration of sustainability criteria and the promotion of social responsibility among suppliers;
- **Respect for human rights:** respecting human rights throughout the value chain (suppliers, employees, customers);
- **Protection of the air:** initiatives aimed at reducing and curbing pollutant emissions into the air (e.g. NOx) resulting from Group operations.

The commitment to the Sustainable Development Goals

While pursuing its business model, Snam combines the commitment to issues deemed material by the Company and its stakeholders with a commitment to the Sustainable Development Goals (SDGs) defined by the United Nations in 2015, demonstrating its own contribution to the development of a sustainable economy and the society of the future.

The 17 SDGs and related targets are a systematisation of courses of action to follow for a more sustainable world and which cover all the macro-areas and modern macro-challenges, such as, for example, the fight against climate change, the defence of ecosystems and the battle against poverty. Among these, the Group has decided to concentrate its actions on several of these goals, developing those that are closest to the mission and activities of Snam, in such a way as to channel its commitment and maximise the results achieved.

Sustainable Development Goals
SDGs

ESG Highlights 2019

Environment

SDGs: 7, 12, 13, 15

2019 Results

- 39.2 million m^3 of natural gas emissions (-12% vs 2018)
- 452 tonnes of nitrogen oxide emissions (-20% vs 2018)
- 182 thousand tonnes of CO_{2eq} prevented (+17% vs 2018)
- 747 km of network subject to environmental monitoring (+68% vs 2018)

Future goals

- -40% emissions of **methane by 2025** compared with 2016
- -40% **Scope 1 and 2** emissions **by 2030** compared with 2016
- 55% **green electricity**/ total electricity ratio by 2030
- -100% **plastic packaging** in the supply chain **by 2023** and **elimination of plastic** in break areas **by 2020** (PlasticLess programme)

Social

SDGs: 3, 4, 5, 8, 9, 17

2019 Results

- Accident frequency index 0.41
- Over 114 thousand hours of training provided
- more than 6,000 hours of volunteering at 70 voluntary sector organisations
- Inclusion in the Bloomberg Gender-Equality Index (GEI) 2020

Future goals

- €400 **million** of investments in the infrastructure replacement programme by 2023
- €350 **million** of investments in innovation and technology by 2023
- 320.000 **hours** of training delivered **by 2023**
- **Extension of Performance Management System**

Governance

SDGs: 8, 10

2019 Results

- 2,490 reputational checks on suppliers and sub-contractors (+20% vs 2018)
- The first company listed on the stock exchange to introduce an ESG Committee
- Policy on diversity & inclusion published
- Best Italian company in the Integrate Governance Index

Future goals

- **Launch of the Inclusion Team** to promote and spread the culture of diversity and equal opportunities, creating a work environment that values all people.
- **Completion of the Compliance Programme** with regard to the targets on the employees training related to the Anticorruption and 231 Model topics:

100% 231 Model **by 2020**

100% Anti-corruption **by 2022**

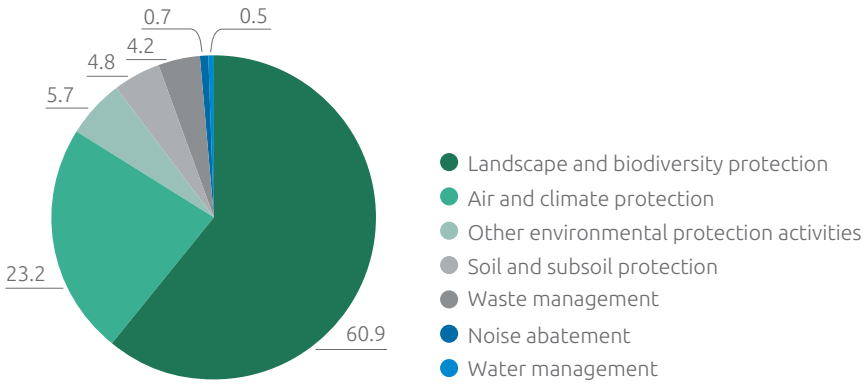
Environment

Protecting the environment, biodiversity, and the territory are integral parts in defining Snam's corporate policies and investment decisions. To guarantee the efficient and transparent management of its environmental aspects, all of Snam's activities are monitored by certified environmental management systems (ISO 14001). In addition, Snam's commitment is also reflected in the challenging targets of the new 2019-2023 Strategic Plan where the Company is committed to reduce its methane emissions by 40% by 2025 (compared with the previous target of 25%) and total Scope 1 and Scope 2 CO_2 equivalent emissions by 40% by 2030 compared with the 2016 figures.

Aware of the role that innovation and new clean energy sources have in achieving the decarbonisation goals, Snam is investing in the development of innovative solutions in its core activities and in the creation of new more sustainable business lines related to energy efficiency, green gases, such as hydrogen, biomethane and bio-LNG and to sustainable mobility.

To safeguard the environment, in 2019 Snam spent around **€114.4 million** (€101 million on investments and €13.4 million on management costs).

Enviromental Expenses (%)



INNOVATION FOR BUSINESS DEVELOPMENT

Snamtec:
40 projects
10 different initiatives:
- energy efficiency
- reduction of emissions
- new energy vectors
- optimisation of the management
- remote control of assets

The development of more efficient and sustainable technologies is of vital importance in the reduction of the environmental impacts of a company. In 2019, various research and development activities launched in previous years were either continued or completed. At the same time, some new projects were launched with a potential impact on various areas of corporate operations. Many of these projects have been conducted with the Snamtec (Tomorrow's Energy Company).

Governance and monitoring of the network and plants

Installation of innovative systems for controlling and monitoring the network and facilities in the following areas:

- **Remote control:** development of the Smart Tel project aimed at analysing the requirements of data acquisition and management processes relating to the control and running of the network, in particular:
  - adoption of IIoT solutions (Industrial Internet of Things) for reporting field data not available to date, for the diagnostics and operation of equipment aimed at making the gas transportation network increasingly more smart also defining supervision and maintenance logics that are appropriate and optimised for all equipment (for example, predictive maintenance);
  - study of preheating plant engineering solutions with automated management aimed at optimising energy efficiency and reducing emissions;
  - rationalisation of transmission equipment in order to have standardised, modular equipment to make the management and maintenance processes for the actual equipment more efficient;
  - creation of a repository with all the data to facilitate the maximum integration and availability of validated data and the implementation of Big Data and Advanced Analytics.
- **Security:**
  - initiatives for protection against fire in plant control rooms through vacuum technology. A project was later launched to install similar fire detection/extinguishing systems in the technical rooms of the compression stations.
  - replacement of plant security management systems by installing electronic systems with SIL certification (Safety Integrity Level)
- **Monitoring compression units:** in 2019 a project was launched for the modernisation of a telediagnostic system for the compression units through the acquisition of thermodynamic and functional parameters for the future development of predictive analysis aimed at improving performance.
  In addition, in 2019 a project was completed for the development of a dashboard that collects the main important parameters needed for dispatch for the improved management of the turbochargers.
- **Electro-compressors:** study for the introduction of electro-compressors at storage sits.
- **Trigeneration:** in 2019 works were completed to put high-efficiency trigeneration plants into operation at the Gallese and Istrana compressor stations. The start up of the system at the Gallese station took place in the last quarter of 2019 achieving an energy saving of more than 65% with further improvement margins following the tuning in 2020.

- **Treatment systems:** installation of latest generation, high performance equipment with a low environmental impact. The first installation of the new generators at the Fiume Trieste facility is expected from 2020.

Physical integrity of infrastructures

Creation of experimental projects and development of specific collaborations aimed at guaranteeing the physical integrity of the infrastructures in the following areas:

- **Collaboration with the EPRG:** it is ongoing the collaboration with the EPRG (European Pipeline Research Group, www.eprg.net), the association for research into pipelines of which Snam is a member.
- **Protection against fire:** installation of safety devices that, in the case of accidental breakage or faults, provide protection against the danger of pressurised gas emissions during the accident scenarios in the case of fire.
- **Micro-seismic monitoring:** an innovative system to protect plants against earthquakes composed of accelerometers capable of instantly detecting seismic events and activating the automatic plant safety systems.

Maintenance and checking of networks

Launch of trial projects for optimising and reinforcing maintenance and checking activities for the transportation networks in the following areas such as:

- initiatives aimed at reducing emissions, with the definition of all preparatory activities for the implementation of an LDAR programme (Leak Detection and Repair) for measuring and repairing leaks in Snam plants.
- maintenance processes: continuation of the Smart gas project aimed at improving the effectiveness of technical and operational processes, for the purpose of a comprehensive revision of the work processes and regulations relating to corporate asset maintenance activities. Specifically, the Smart LNG design and realisation phase was launched in 2019 for operations at the Panigaglia LNG terminal. The dematerialisation of the archives in the regional units continued through the eDoc document system which will be fully integrated in Smart gas.
- leak detection: implementation of a system aimed at locating gas leaks along the transport network, based on the analysis of the pressure waves and the detection of possible disruptions.
- checks with flyovers: development of drone flight infrastructure in BVLOS mode (Beyond Visual Line of Sight).

Gas metering

Development of innovative technologies and methodologies for metering and controlling natural gas and related impact in the following areas:

Alternative instruments and quality measurement:

- technological adaptation project with the installation of quality analysers and the automation and remote reading of the main measurement and reserve measurement.
- project for the installation of dew point H_2O meters and hydrogen sulphide analysers.
- Estimating natural gas emissions: evaluation of methods for estimating natural gas emissions and research into the potential impacts, throughout the gas supply chain, of chemical components present in traces in biomethane is continuing in order to create the conditions for its safe development in conjunction with the European research group GERG (Groupe Européen de Recherches Gazières, www.gerg.eu).

New businesses

Creation of dedicated working parties to take an in-depth look into issues related to the development of new businesses with special reference to:

- Innovative use of existing infrastructures: sharing of information and expertise on the use of infrastructures in relation to their capacity for transporting and storing gases other than natural gas, including hydrogen:
  The following initiatives were also examined under the scope of European associations (Marcogaz):
- Power 2 Gas: the process through which the electricity produced by renewable sources that is surplus to immediate consumption is transformed into hydrogen to be injected directly into the network (limited to the technically-acceptable quantities) or used for the production of synthetic methane (SINGAS) also to be injected into the network and possibly stored later.
- Adsorbed Natural Gas (ANG): this is one of the latest technological developments for the storage of natural gas in tanks. The adsorption of natural gas in a porous sorbent injected into a recipient (tank/canister) takes place at ambient temperature and low pressure (25 - 35 bar).

Protecting the climate and the air

Snam's management of the environmental aspects aims to protect the climate and the air, in line with the Company's commitment to a sustainable energy transition. By its nature, the natural gas, Snam's core business, offers an energy solution that has far less of an impact compared with traditional fossil fuels such as diesel and oil, facilitating the domestic and European journey towards decarbonisation.

In the 2019-2023 Strategic Plan, Snam has reinforced its objectives, increasing the target previously set for reducing its methane emissions by 2025, going from -25% to -40% compared with the 2016 figures, through a reduction in emissions from LNG transportation, storage and regasification activities. An investment plan was implemented to reach these targets that makes it possible to maintain and develop natural gas recovery programmes from maintenance activities by 33% every year until 2022. Snam has also established an ambitious climate altering emissions reduction plan, setting a target of a -40% by 2030, compared with the 2016 values for (Scope 1) direct CO_2eq emissions and (Scope 2) indirect emissions from energy use, including through the definition of a new target related to the use of green electricity by 2030.

-40%
by 2025

Reduction of natural gas emissions
(compared to 2016)

-40%
by 2030

Reduction of GHG emissions Scope 1+2
(compared to 2016)

55%
by 2030

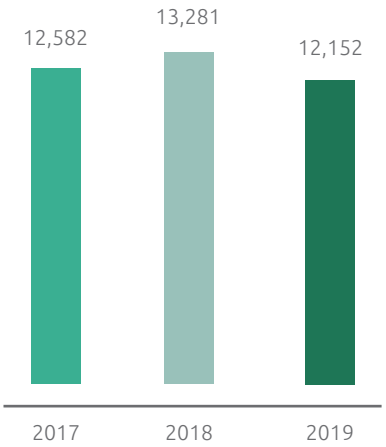
Green electricity used

ENERGY CONSUMPTION

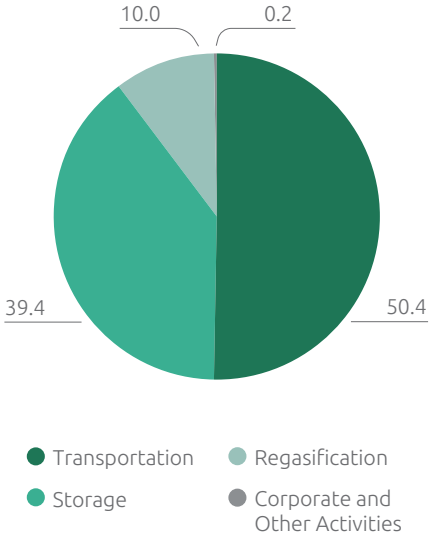
2019 total energy consumption:
-8.5% compared to 2018

In 2019 the total energy consumption stood at 12,152 TJ (-8.5% compared with 2018) in spite of an overall increase in the gas injected into the network (+3.5%). This result was facilitated by the fact that, compared to 2018, the gas was imported from less energy-intensive routes, namely there was less use of the North Africa backbone network.

Energy consumption (TJ)



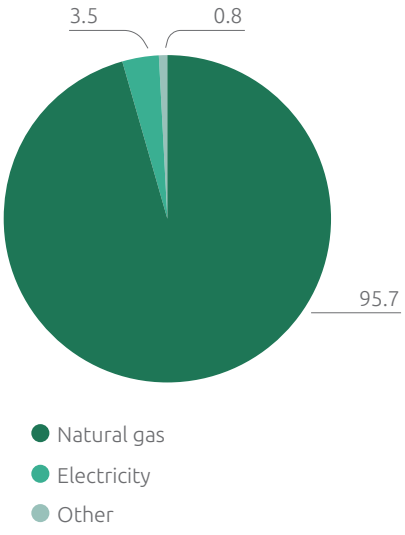
Energy consumption by activity (%)



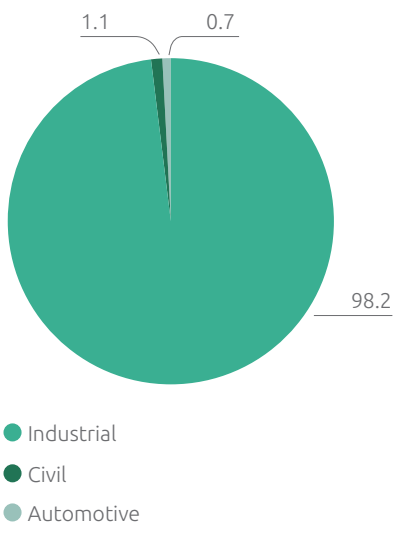
Natural gas
95.7% on total energy mix used

The energy mix used by the Company is made up almost totally of natural gas (95.7% of the energy requirements). Other sources used are electricity (3.5%), other fuels (diesel, oil, LPG) and heat, which together represent the 0.8% of consumption. Most of the Snam's energy consumption is due to the gas turbines used in the compression systems which provide the pressure required for gas transportation (thrust consumption) and to storage activities, which, overall, represent the 81% of total consumption, down by 88% from 2018.
In 2019 there was an increase in the energy consumption for the gas regasification plant, equal to the 10% of the Group's total consumption (3.5% in 2018). This is due to the increase in the quantity of regasified gas (+170%).

Energy consumption by source (%)



Energy consumption by use (%)



THE PRODUCTION OF ENERGY FROM RENEWABLE SOURCES

In line with the Snam's commitment to reduce the energy consumption relating to its activities, in 2019 the Company committed to improving the energy efficiency of its buildings (territorial headquarters and maintenance centres) and its gas storage facilities, through the installation of solar panels. In 2019 the total number of plants reached 1,794 units (+17% compared to 2018) and the installed power increased by 75 kW compared to 2018, passing from 1,054 kW to 1,129 kW (+7%).

This increase mainly involves the installation of 258 new back-up systems and a new photovoltaic system connected to the electricity grid.
In 2017 specific KPIs and a quantitative target for energy efficiency, to be reached by 2022, were set. The results achieved during the year were in line with the expected trend with the exception of the target for the electricity production from photovoltaic plants, which went from around 1,128,400 kWh in 2018 to around 830,000 kWh in 2019. This reduction was caused by the non-availability of several systems adversely affecting the forecasted annual production.

Renewable source plants

Type	2017			2018			2019		
	(no.)	Total capacity (kW)	Energy produced (kWh)	(no.)	Total capacity (kW)	**Energy produced (kWh)**	(no.)	Total capacity (kW)	**Energy produced (kWh)**
Wind generators	1	1.7		1	1.7		1	1.7	
Photovoltaic plants	1,366 (*)	984	1,044,309	1,534	1,053	**1,128,383**	1,793 (*)	1,127	**829,459**
Total	1,367	986		**1,535**	**1,054**		**1,794 (*)**	**1,129**	

(*) including 1,755 back-up plants.

Key Performance Indicators (KPI)

Description of KPI	KPI Year	KPI quantitative target	Target reached in 2019	Sector	Activity
Increase production of electricity from photovoltaic plants	2017	Produce at least 860 MWh annually (until 2022)	830 MWh	Snam	●
High-efficiency heat generators	2017	Install a power of 100 MW by 2022	66.5	Transportation	●
Trigeneration plants	2017	Produce 5,200 MWh by 2022	359 MWh (1)	Transportation	●
Installation of LED lighting systems	2017	Replace 534 kW by 2022 with a saving of 1860MW	351 kW installati 273 MWh risparmiati (2)	Transportation Storage	●
Energy efficiency improvement for buildings	2017	Restructure buildings annually saving 75,000 m^3 of gas and 210 MWh of electricity by 2022	15,000 m^3 of gas	Transportation	●

(1) production is calculated at 1 site that came into operation at mid year. The other site came into operation at the end of the year therefore production is negligible.

(2) some plants came into operation at the end of the year so the savings are negligible.

● Annual target not reached (KPIs with multiyear targets) ● Activity in progress

Tep Energy Solution

In May 2018 Snam acquired a controlling share, equal to 82% of the share capital, of TEP Energy Solution (TEP), one of the main Italian companies operating in the energy efficiency sector.
TEP is an ESCo (Energy Service Company), accredited at Gestore dei Sistemi Energetici S.p.A. (GSE), which is mainly involved with energy requalification and deep renovation operations for apartment buildings and industrial sites for civil and service sector.
TEP also provides advisory services to support energy-intensive businesses and large companies to identify the actions necessary for the reduction of the energy consumption and the environmental impact in relation to their corporate processes (carbon footprint and LCA, energy diagnoses, energy management systems compliant with ISO 50001:2018).
In 2019, TEP market activities concentrated on various lines of intervention, integrating energy efficiency solutions in domestic, tertiary and industrial sectors.

Apartment blocks - integrated solution called "CasaMia"

The company offers energy diagnostic services for the design and realisation of interventions with innovative solutions (modernisation of thermal power stations, construction of thermal walls, improvement of seismic class, etc.) that make it possible to guarantee the heating and climate control requirements and needs are met at the same time reducing consumption and CO_2 emissions. In 2019 29 interventions were carried out which led to a reduction in CO_2 emissions of around 765 tonnes/year.

"Mosaico Verde" (Green Patchwork) Campaign

The company joined the national reforestation campaign promoted by Legambiente and AzzeroCO_2. Under the scope of this initiative, in 2019 TEP created the first urban wood in Padua by planting 1,000 new native trees (linden, oak, field maple and Guelder-rose) in an urban area that was previously grassland.
The goal is to create a green lung to curb atmospheric and acoustic pollution, absorb CO_2 emissions (by around 20 tonnes per year) and improve the quality of life of the area, with a recreational area for residents and children in the nearby schools.

Industrial and tertiary sector - ESCO energy efficiency interventions

The Company carries out operations that involve the adoption of efficient technologies for reducing the environmental impact of production activities and processes, with the guarantee of achieving the savings estimated in the design stage. The interventions mainly relate to the utilities (thermal power stations, lighting, cogeneration, purification, environmental climate control) with savings main in thermal energy. In 2019, 3 new plants were built which, together with the 5 plants constructed previously and managed by TEP, has led to an overall reduction of CO_2 emissions into the atmosphere of around 1,050 tonnes/year.

Energy Efficiency Certificates TEE (so-called White Certificates)

TEEs are incentives recognised by the GSE for energy efficiency actions where the savings actually achieved can be measured and reported. TEP supports customers, mainly in the industrial sector, with the management of projects for recognising these certificates and for the subsequent calculation of savings to report to the GSE. In 2019 59,612 TEEs were produced. The TEEs produced in the year, counting the production activities and processes of end users, certify a reduction in CO_2 emissions of around 134,000 tonnes (83,000 for the reduction of thermal consumption and 51,000 for the reduction of electricity consumption) counted for the production activities and processes of end users.

GHG total emissions

-2.6%

compared to 2018

GREENHOUSE GAS EMISSIONS

The main greenhouse gas emissions (or GHG) resulting from Snam's activities are methane (CH_4), the main component of natural gas, and carbon dioxide (CO_2). Methane emissions arise from the release of natural gas into the atmosphere and are generated by the normal plant operation, by operations to connect new gas pipelines and the maintenance thereof, or by accidental events occurring on infrastructure, whereas the CO_2 produced is directly correlated with fuel consumption and the fuel. In 2019, like last year, the marginal contribution to direct emissions from the use of hydrofluorocarbons (HFC) in refrigeration systems was assessed as equal to approximately 1.48 kt CO_{2eq}.

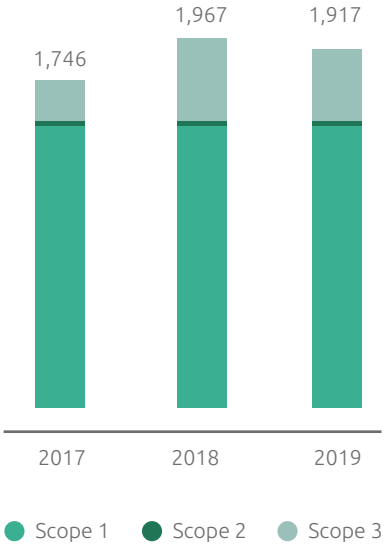
In line with the international reporting methods for GHG emissions, Snam broke down and analysed its emissions into Scope 1 direct emissions and Scope 2 indirect emissions from energy use and Scope 3 other indirect emissions. Direct emissions refer to Snam's fuel consumption, while indirect emissions refer to electricity consumption and heat consumption (Scope 2) and other CO_2 emissions released along the company's value chain (Scope 3).

The total GHG emissions stood at around 1.92 thousand tonnes of CO_{2eq} (-2.6% compared to 2018). The total reduction in emissions is mainly due to the interventions implemented to reduce direct emissions (Scope 1), which, however, was mitigated by the increase compared with the previous year of Scope 3 indirect emissions relating to business travel and the emissions generated along the supply chain. Specifically, Snam adopted various initiatives to reduce emissions, such as, for example:

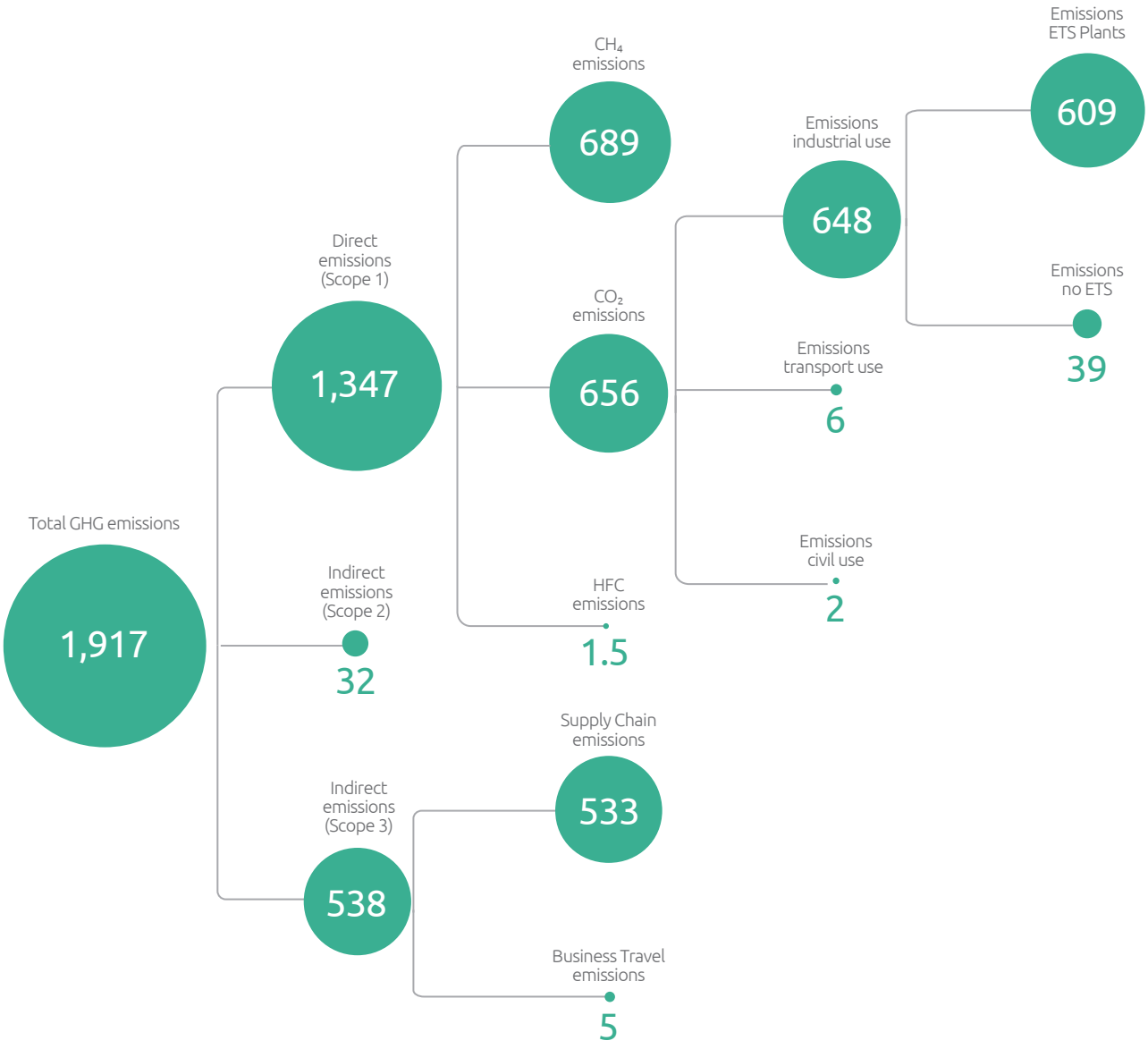
- recovery of natural gas emissions;
- production of electricity from photovoltaic plants;
- acquisition of green electricity;
- installation of LED lighting systems;
- renovation and efficiency improvements for buildings;
- greater use of smart working among employees.

These activities have allowed the Company to prevent the emission into the atmosphere of **181,800 tonnes of CO_{2eq}**, the highest figure in recent years (+17% compared to 2018).

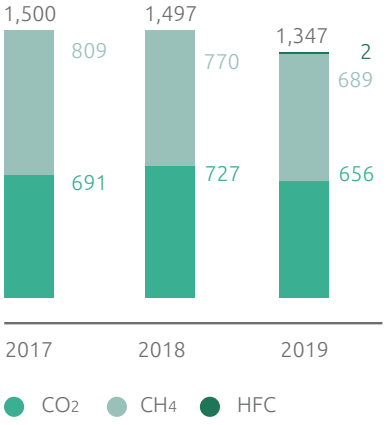
GHG emissions (kt CO_{2eq})



Greenhouse gas (GHG) emissions kt CO_{2eq}



Total direct GHG emissions Scope 1 (kt CO_{2eq})



DIRECT CO_{2eq} EMISSIONS (SCOPE1)

The direct emissions of CO_{2eq} stood at around 1.35 million tonnes, a clear reduction compared with 2018 (-10%). CO_2 emissions from combustion stood at around 0.656 million tonnes (-9.7% compared with 2018), while CO_{2eq} emissions from methane and HFC emissions stood at around 0.69 million tonnes (-10.4% compared to 2018).

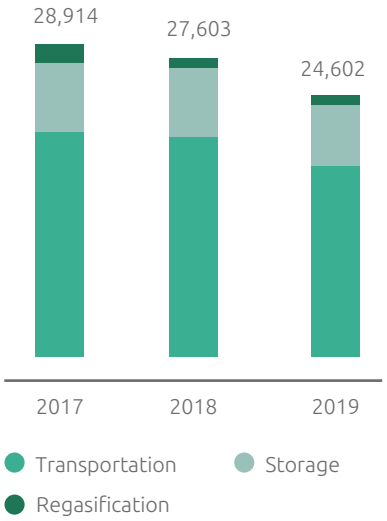
Natural gas emissions stood at 39.2 Mm^3, a reduction compared with the figure of 44.4 Mm^3 in 2018 (-11,7%).

3) The measurement of CO_{2eq} was carried out in accordance with the scientific study of the Intergovernmental Panel on Climate Change (IPCC) "Fifth Assessment Report IPCC" which gave methane a Global Warming Potential (GWP) score of 28.

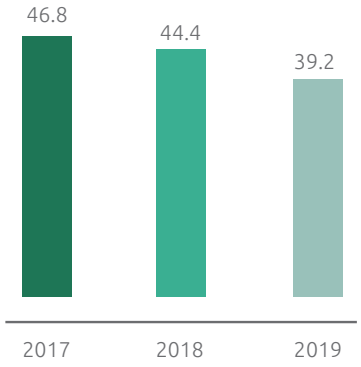
The In-line gas recompression interventions, interventions with tapping machines, technology that makes it possible to disconnect pipelines in operation for new connections without an interruption to the service, and other initiatives have allowed Snam in 2019 to prevent the emission into the atmosphere of 9.4 million cubic metres of natural gas, equal to around 165,000 tonnes of CO_{2eq} (+16% compared with the figure of 142,000 tonnes of CO_{2eq} in 2018).

As a confirmation of the benefit of the measures taken, emissions of methane per kilometre of network for the transportation activities fell further (-12% compared to 2018 and -15.4% compared to 2017).

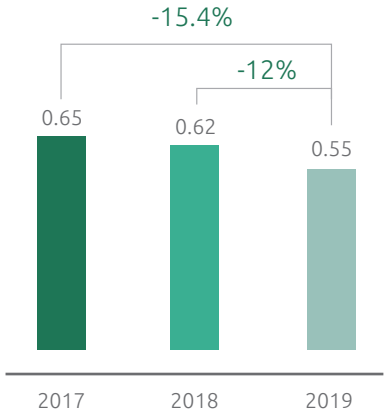
Methane emissions (t)



Natural gas emissions (Mm³)



Methane emissions/network (t/km)



The Company's performance indicators are in line with its methane emission reduction targets. Specifically, in 2019 Snam increased its reduction target for CH_4 emissions by 2025, from -25% in 2018 to -40%. The current situation is in line with this target (-19%).

Furthermore, in 2019 Snam recovered the 56% of natural gas emissions during maintenance activities, in line with its target of 33% per year by 2022.

Key Performance Indicators (KPI)

KPI description	KPI Year	KPI quantitative target	Target reached in 2019	Sector	Activity
Natural gas recovered over total potential emissions from maintenance activities	2019	Recover at least 33% every year (up to 2022)	59%	Transportation	●
Limit natural-gas emissions (*)	2019	Reduce emissions by -40% by 2025 compared to 2016	-19%	Transportation, Storage and Regasification	●

● Annual target reached (KPI with multiyear targets)

(*) The KPI was reprogrammed with more challenging targets

INDIRECT CO_{2eq} ENERGY EMISSIONS (SCOPE 2)

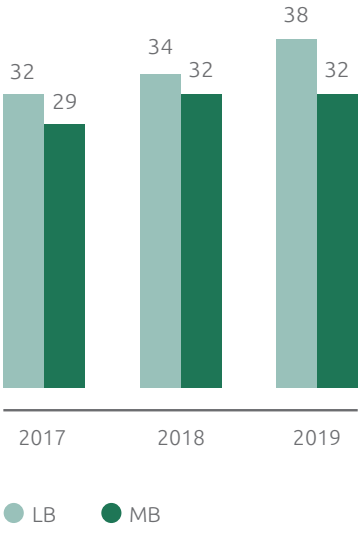
Indirect energy CO_{2eq} emissions are due to the procurement of electricity and heat produced by third parties and used by Snam for its activities. Indirect emissions are calculated both through the Market Based approach (MB), which allocates a zero CO_{2eq} emission factor for the energy consumption from certified renewable sources, and a Location Based approach (LB), that considers an average CO_{2eq} emission factor for the national electricity grid.
Electricity consumption, equal to around 117,380 MWh, increased by 12% compared to 2018. Specifically, the increased consumption is due to the LNG regasification facility, which, in 2019, regasified a greater quantity of gas, and the Digital Transformation and Technology (DT&T) activities for the redistribution and movement of the data centres. The greater consumption resulting from the LNG site was completely neutralised in terms of Scope 2 emissions thanks to the procurement of green electricity, while the emissions due to the greater consumption recorded on the other sites were partly mitigated by a new gas power plant switching to an electricity power plant certified as renewable on the Enna site. This plant joins those of Messina and Terranuova B. (SRG), Brugherio (STG), the Panigaglia LNG Plant and several areas of Snam4Mobility. CO_{2eq} emissions calculated according to the MB method stood at around 32 thousand tonnes, in line with 2018 in spite of an increase in total electricity and heat consumption of 13% if calculated using the LB method, evidence of the continuous increase in energy produced from renewable sources.

Specifically, the ratio between the use of electricity produced from renewable sources and total electricity consumption increased further going from 37% in 2018 to 44% in 2019, thereby preventing the emission into the atmosphere of around 16,100 tonnes of CO_{2eq} (+ 4,000 t compared to 2018).

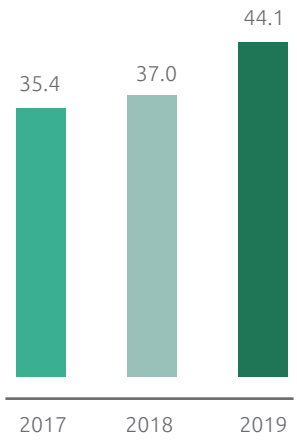
OTHER INDIRECT CO_{2eq} EMISSIONS (SCOPE 3)

Indirect CO_{2eq} emissions stood at approximately 538 thousand tonnes, a 22.8% increase compared to 2018 following an increase in procurement and the different nature of the supplied materials and goods. This category of emissions stems around 99% from the supply chain and the remaining share is due to employees' business travels. Further initiatives are ongoing and aimed at promoting a culture of energy saving and minimising indirect emissions associated with Snam's activities: the adoption of green procurement criteria for goods and services, sustainable mobility initiatives and the implementation of initiatives for energy savings directed at employees (company shuttle services, public transport subsidies, smart working and the use of video-conferencing for meetings) and the launch of the supply chain CDP programme are just some of the initiatives in progress that contribute to the reduction of this type of emissions.

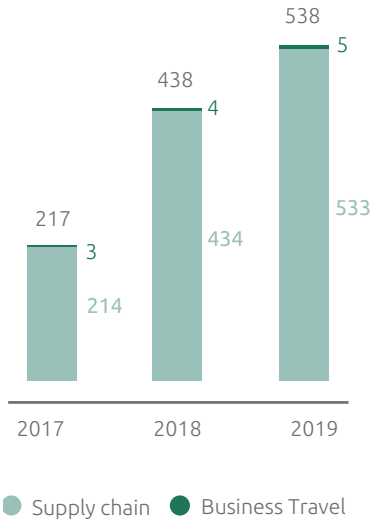
Indirect GHG emissions Scope 2 (kt CO_{2eq})



Green electricity/Electricity consumption (%)

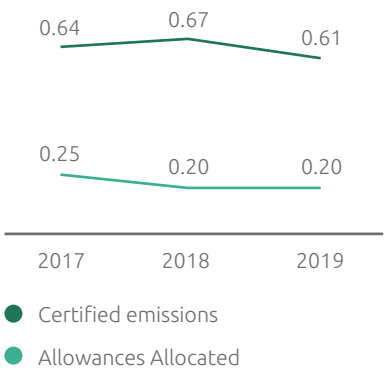


Indirect emissions Scope 3 (kt CO_{2eq})



EMISSIONS TRADING SYSTEM (ETS)

CO_2 emissions from ETS plants (10^6t)



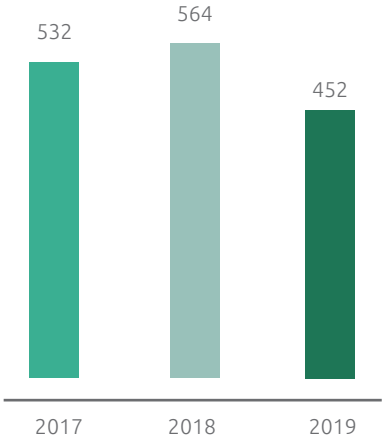
The carbon dioxide emissions of the Snam Group facilities subject to the ETS were overall greater than the emission shares allocated. The annual allocation of free allowances by the competent national authority gradually reduced over the years as set out from the third regulatory period in Article 10 bis of Directive 2009/29/EC. In view of around 0.609 million tonnes of carbon dioxide emitted into the atmosphere, around 0.202 million tonnes were allocated free of charge, resulting in a 0.407 million tonne deficit. The allowances allocated also include those intended for the new gas compression plants of Minerbio and Sergnano in 2018 and 2019.

Snam Emissions Trading Systems

Activities	Number of plants	Name of plants
Transportation	13	Gas compression stations in Enna, Gallese, Istrana, Malborghetto, Masera, Melizzano, Messina, Montesano, Poggio Renatico, Tarsia, Terranuova Bracciolini, Minerbio, Sergnano
Storage	8	Storage gas compression stations in Cortemaggiore, Fiume Treste, Minerbio, Ripalta, Sabbioncello, Sergnano, Settala and Bordolano
Regasification	1	Panigaglia LNG regasification facility

NITROGEN OXIDE EMISSIONS

Total NOx emissions (t)

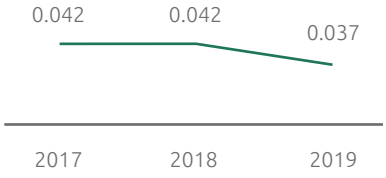


The use of natural gas as the main energy source allows sulphur oxides and particle emissions to be minimised compared to the use of other fossil fuels. Of these, the only significant emissions are those of nitrogen oxides (NOx) , that derive mainly from the combustion of natural gas in the gas turbines installed in the compression plants (thrust and storage). A programme was launched in recent years to curb these emissions by replacing traditional turbines with low emission turbines which, to date, account for almost all the turbines installed. Specifically, with the DLE turbine coming into operation in 2019 in the Minerbio storage plant as well, all the storage sites were operating with low emission units.

The reduction in energy consumption and the virtually total use of DLE turbines has led to a reduction in total nitrogen oxide emissions, in absolute terms of -20% compared to 2018 and a reduction in the ratio between nitrogen oxide emissions and energy use of 12%.

Average NOx emissions for the installed power of the storage machinery were further reduced by almost 30% going from 5.2 to 3.7 ([mg/Nm^3]/MW) while those for thrust remained unchanged, taking into account that they had already reached 3.8 ([mg/Nm^3]/MW) last year.

NOx emissions/energy used (kg/GJ)



Emissions of NOx into the atmosphere were calculated based on direct measurements or, if not available, through emission factors in literature (EMEP/EEA "Air pollutant emission inventory guidebook" European Monitoring and Evaluation Programme/European Environment Agency).

During the year and in the transportation sector alone, **99 meetings** were held with local administrations and associations to illustrate works projects. **Eight agreements** were concluded with these associations regarding easements.

Protecting the local area and biodiversity

INFRASTRUCTURE SECURITY

During the design of the network, Snam takes into account aspects related to transportation and infrastructure security, the technical and economic feasibility of the works and their environmental impact. In addition, great importance is also attributed to the inclusion of the work in its context and in complying with landscape equilibrium with the visual and natural impact kept to a minimum. Advanced procedures and technologies were adopted in the realisation of the works which, subject to technical and economic feasibility, minimise the impact on the environment as far as possible. Where possible, as an alternative to traditional excavation techniques, Snam uses suitable advanced techniques such as, for example, trenchless techniques, for the construction of tunnels or micro-tunnels, thereby also reducing the use of site equipment and the extent of the work area. Following the design and installation phase, Snam guarantees 360° monitoring of its assets, engaging in the research and development of technologies that allow complete control of the infrastructures. In order to detect potentially critical situations in the network and act promptly in the case of unforeseen external phenomena, the pipelines are inspected regularly by specialist personnel on foot, in vehicles and by helicopter. The same attention is also devoted to connection lines between storage facilities (compression and treatment) and the related auxiliary systems.

The Company relies on advanced technologies capable of exponentially improving the quality and quantity of checks on all its assets. The use of drones and satellites for checking networks and systems is evidence of the Snam's commitment to making its infrastructures increasingly more secure and efficient: with this in mind, in 2019, Snam launched the first trial of a long-distance civil flight of a remote-control operated drone for monitoring the network. Snam also uses smart pigs to check and inspect the pipelines; these are smart devices equipped with sensors which, travelling inside the pipelines, can detect the presence of any defects or irregularities in the material or the minimal movement of the pipes. Geological inspections were also conducted and any land slippage at specific points of the route kept in check with the help of real time data collection systems that use a specific remote detection method, interferometric satellite SAR and CGPS stations.

Snam continuously monitors and checks the storage facilities through detection systems that automatically activate the security system as needed. The most frequently used systems are: explosive mixture detectors, fire detectors, smoke detectors, high or low pressure switches, pressure transmitters, fuse plug systems and heat sensitive cables, sound-level meters for detecting gas leaks and extinguisher systems.

Monitoring and inspecting the network

	2017	2018	2019
network inspected using smart pigs (km)	1,632	1,651	**1,651**
network inspected by helicopter (km)	16,274	18,462	**20,178**
network subject to geological inspection (km)	4,080	4,209	**5,163**

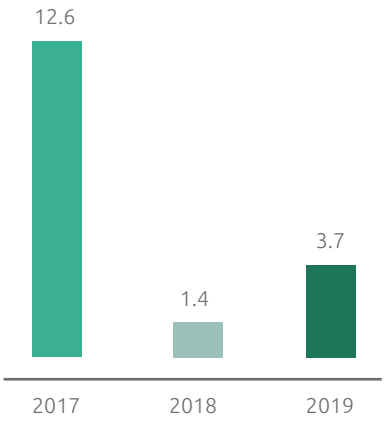
The dispatching centre

Dispatching involves the monitoring and remote control of transportation, receiving data from around 3,800 plants located throughout Italy, 1,600 of which are remotely controlled.
With the use of specific software applications, the information collected allows, even on the basis of historic consumption data and climate condition forecasts, the formulation of short-term forecasts for redelivery demand and the simulation and optimisation of gas flows in the network, guaranteeing the best arrangement of the compression systems to reduce their consumption and curb emission levels. Network activities and the physical balancing of the system are constantly guaranteed by an operating room functioning 24 hours a day, 7 days a week, based on the programming defined by customers and in conjunction with the operators of foreign infrastructures connected to the Italian network, ensures the correct movement of the gas from the injection points to the withdrawal points. The dispatching centre remotely controls over 9 storage facilities, planning and carrying out surface treatment, well area and compression activities, guaranteeing secure execution in any operating conditions, routine or abnormal.

THE PROTECTION OF BIODIVERSITY

Once the installation phase of the pipeline is completed, the Company launches a series of operations aimed at restoring the pre-existing vegetable and morphological conditions, guaranteeing the stability and natural balance of the surrounding habitat and promoting the biological functionality of the area. This commitment is explained through the launch of a plan for at least fifteen years of reforestation, care and maintenance of plants and shrubs following by an environmental monitoring phase of the surrounding natural area, comparing the conditions after restoration with the original conditions.

Distance covered by pipelines in Natura 2000 networking sites (km)



Environmental restoration and monitoring (network km)

	2017	2018	2019
Restoration	203	227	**63**
New reforestation*	21	21	**8**
Plant care	59	74	**73**
Environmental monitoring	388	445	**747**

* In 2019 the new reforestation area involved an area of around 157,500 m² (410,500 m² in 2018)

The Natura 2000 sites are the main instrument used by the European Union's policy for preserving biodiversity. Established pursuant to the Habitat Directive 92/43/CEE for preserving the natural habitats in the EU, the Natura 2000 network is composed of Sites of Community Interest (SCI), Special Areas of Conservation (SAC) and Special Protection Areas (SPA). In 2019 the SCI IT 9350136 "Vallata dello Stilaro" in Calabria was affected by Snam's activities, for a total distance of 3.7 km, following the construction of the "Sant' Andrea Apostolo dello Ionio - Caulonia" pipeline and associated works.

-100% of plastic in industrial packaging by 2023

Snam Plastic Less

As well as being a serious risk for the environment and animals, plastic is also a danger to human beings. Proof of this is the report published by the Center for International Environmental Law (CIEL) which stresses the urgency of adopting precautionary principles to protect mankind from plastic pollution.
According to Assorimap, the national association for plastic recyclers and regenerators, in Italy one a quarter of the 2.1 million tonnes of plastic used is recycled. According to the report "The New Plastics Economy: Catalising Action" by the Ellen MacArthur Foundation, only the 14% of plastic packaging used globally is collected and sent correctly to the recovery plants; all of the rest is incinerated, sent to landfill or dispersed into the atmosphere.
Snam wants to make its contribution to reducing the use of plastic and, for this reason, in 2019, it launched the **"Snam Plastic Less"** initiative aimed at reducing the use of plastic in industrial packaging by 100% by 2023 and eliminate single-use plastic in drinks vending machines at all its company premises by 2020. A plan aimed at interventions in the supply chain and communication to Company employees.
In addition, Snam plans adopt new supplier evaluation systems in future tenders capable of assessing the use of single-use plastic in packaging and promoting alternative packaging.

Key Performance Indicators (KPI)

KPI description	KPI Year	KPI quantitative target	Sector	Activity status
Reduction of the plastic quantity in the packaging of industrial supplies	2019	100% in 2023	Snam group	●

● Project in progress: multi-year objective

In order to correctly evaluate the environmental and safety aspects and impacts associated with its works, Snam carries out preliminary analyses under the scope of Environmental Impact Assessment (EIA) and Integrated Environment Authority (IEA) procedures, following which the administrations, both centrally and locally, release the authorisation required by applicable law.

Snam also evaluates, in relation to the performance of the most important works (compression systems or large natural gas pipelines), the direct and indirect economic and social impact on the territory and on the local communities with "Social Impact Assessment" tools and methods. Specifically, in 2019, the collaboration project with the Department of Economics and Management of the University of Brescia, for the revision of the methodology used adopting a regionalised input-output model, was concluded. This model made it possible to evaluate the impact of a project, calculating the added value generated by the investment starting with the total value of production.

Hydraulic studies and mitigation measures, environmental restoration

Some of the most obvious consequences of climate change can be observed in the increase of acute weather conditions, such as flooding, landslides and droughts. Increasingly prolonged heavy rain seasons cause serious erosion of the banks of waterways, especially in valleys and overflow areas, with a consequent direct loss of habitats and biodiversity.

In order to mitigate and reduce the risk of potential erosion and guarantee high levels of protection and security for the pipes, Snam has produced detailed studies of hydraulic characterisation of the waterways affected by project works, in order to increase familiarity with the water environment affected by the works and to be able to plan the most appropriate hydraulic restoration works. In the design phase naturalistic engineering techniques are regularly employed involving the joint use of inert materials such as gravel, earth and timber, combined with plants and/or parts of plants (cuttings), which, thanks to the progressive development of radical equipment, are capable of exercising an important consolidation and stabilisation action on the soil, at the same time increasing the drainage capacity.

The bank and riverbed reconstruction technique is normally adopted for the consolidation of the banks and the riverbed. It is usually called **"breakwaters"** and **"covering the riverbed with boulders"**, using natural rocks that are available locally. Thanks to this technique it has been possible to establish actions to protect the banks, prevent the risks of soil consumption and loss through erosion, conserve the environmental balance and guarantee excellent harmony and aesthetic-landscape integration in the natural environment in which the work is carried out. The combined use of cuttings and the planting of native plants and shrubs helps establish the naturalisation process and the preservation of the biodiversity of the areas.
A recent morphological and hydraulic restoration through naturalistic engineering works was carried out in Sicily, in the province of Enna in the municipality of Piazza Armerina on the pipeline "Upgrading imports from Algeria to Italy - DN 1200 (48")", which runs through the Schiavo stream, affecting a stretch of the valley floor about 1,500 m long.

The bank reconstruction work with a covering of boulders fits perfectly in an environmental setting featuring undulating morphology with areas of grassland, meadows, arable land, hygrophilous vegetation and some sections of eucalyptus forests.
This work constitutes an important action for safeguarding the area from extreme meteorological events such as those that took place between 2016 and 2018 during which there was very serious bank erosion.

EIA decrees obtained during the year

Name	Length (km)	Regions involved	Authority	Date of decree
Pipelines				
San Salvo - Biccari reconstruction	87,000	Apulia	Ministry of the Environment and Protection of Land and Sea	08/11/2019
Mestre – Gonas Overhauling and Downgrading	80,200	Veneto - Friuli Venezia Giulia	Ministry of the Environment and Protection of Land and Sea	05/11/2019
Ravenna Mare - Ravenna Terra reconstruction	25,980	Emilia-Romagna	Ministry of the Environment and Protection of Land and Sea	29/10/2019
Campodarsego - Castelfranco Veneto reconstruction	23,360	Veneto	Ministry of the Environment and Protection of Land and Sea	26/09/2019
Pieve di Soligo - San Polo di Piave - Salgareda reconstruction	34,700	Veneto	Ministry of the Environment and Protection of Land and Sea	05/09/2019
Gagliano Termini Imerese	38,340	Sicily	Ministry of the Environment and Protection of Land and Sea	06/03/2019
Rimini-Sansepolcro pipeline reconstruction and associated works	81,915	Emilia Romagna and Tuscany	Emilia Romagna Region	25/03/2019

Provisions for verification of whether subject to EIA obtained during the year

Name	Length (km)	Regions involved	Authority	Date of order
Pipelines				
Variant crossing the Trigno River By-pass for Trivento-Agnone	0.977	Molise	Ministry of the Environment and Protection of Land and Sea	21/11/2019
By-pass for Altino 2nd Tronco variant hydraulic construction works for the River Secco	0.070	Abruzzo	Ministry of the Environment and Protection of Land and Sea	02/04/2019
Tortona - Alessandria - Asti - Turin Reconstruction FR 39.1	3.680	Piedmont	Ministry of the Environment and Protection of Land and Sea	06/03/2019
Variant for PIDI insertion no. 18.2 at Chieti - San Salvo (CH)	1,132	Abruzzo	Ministry of the Environment and Protection of Land and Sea	26/02/2019
S. Anna River Crossing reconstruction (KR)	0.640	Calabria	Ministry of the Environment and Protection of Land and Sea	15/02/2019
HPRS IS64/24 bar Castellana Grotte system on Castellaneta - Castellana Grotte pipeline	-	Apulia	Ministry of the Environment and Protection of Land and Sea	16/01/2019

EIA applications submitted to Ministry of the Environment and Ministry of Cultural Heritage

Name	Length (km)	Regions involved	Date of submission
Pipelines			
Variants S. Eufemia - Crotone S. Anna River Crossing reconstruction (KR)	0.640	Calabria	25/10/2019
Annex BIO ECOAGRIM s.r.l. of Lucera	1.052	Apulia	13/06/2019
Sestri Levante - Recco	47.800	Liguria	23/05/2019

Applications submitted to the Ministry of the Environment to check EIA requirements

Name	Length (km)	Regions - Provinces involved	Date of submission
Pipelines			
Alessandria – Cairo Montenotte - Savona Trappole	-	Piedmont - Liguria	19/12/2019
By-pass for Matera in the Municipality of Lauria	21.800	Basilicata	02/12/2019
Optimisation of the Recanati-Foligno Frazione Colfiorito layout	16.960	Marche - Umbria	28/10/2019
Benevento-Cisterna variants	2.097	Campania	03/10/2019
Pessano - Calolziocorte variants	5.185	Lombardy	25/06/2019

Applications submitted to the Ministry of the Environment to check EIA requirements

Name	Capacity (MW)	Regions - Provinces involved	Date of submission
"Sergnano Storage" Concession - Installation TC1	25 mechanical-66.9 thermal	Lombardy	03/07/2019

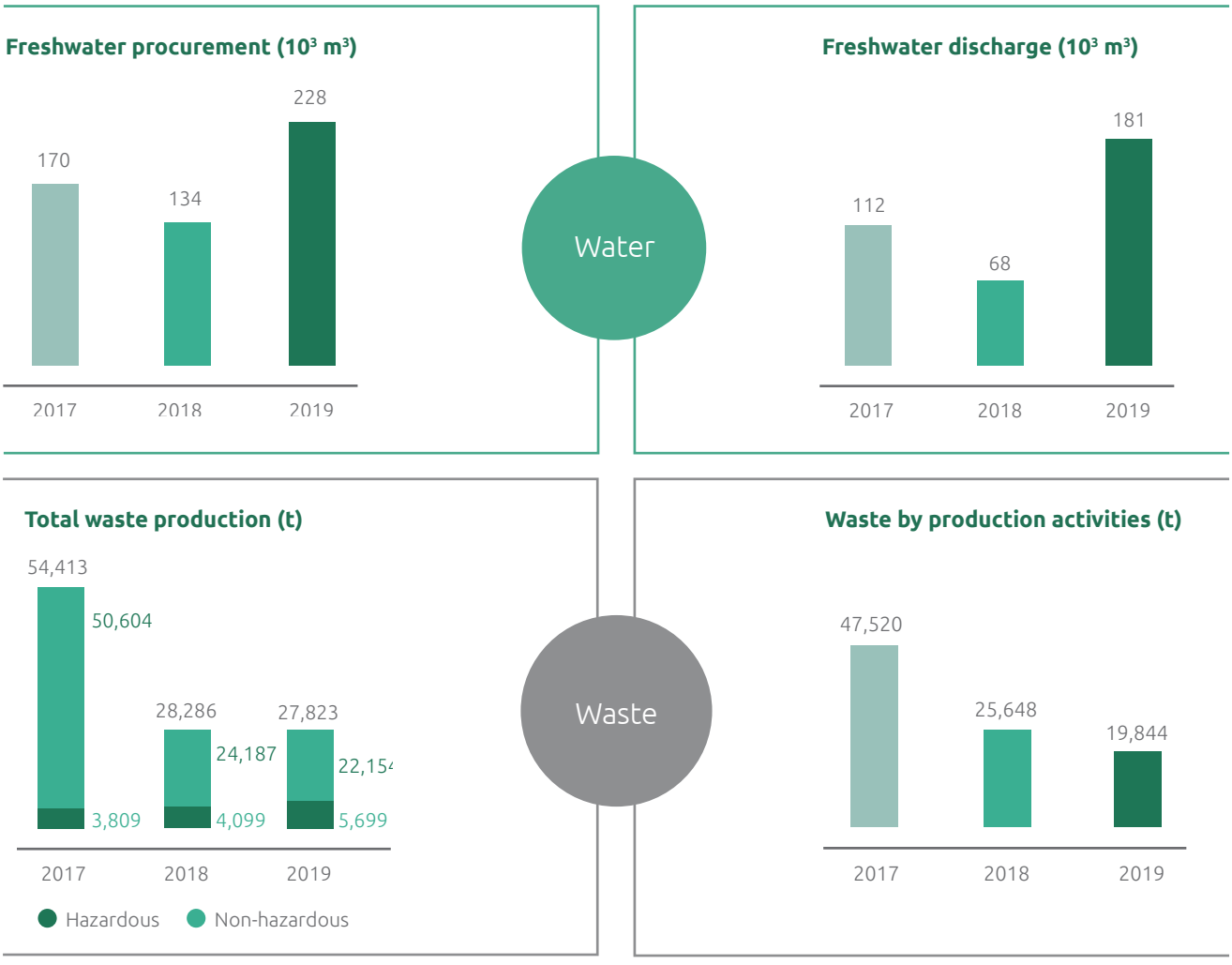
WATER AND WASTE MANAGEMENT

Water consumption, water discharge and the production of waste are environmental aspects for Snam to be carefully managed, both from the perspective of quality and quantity, in order to reduce the associated environmental impacts. The Company started to develop a production cycle that is as circular and efficient as possible, improving performances in relation to the consumption of the resources used.

From the point of view of consumption, sea water and fresh water are used respectively in the production process and in company premises. In 2019, approximately 6.23 million cubic metres of water (6 million cubic metres of sea water and 0.23 million cubic metres fresh water) were extracted. The sea water was collected for cooling the auxiliary systems in the LNG plant and the same volume was discharged back into the sea, at a higher temperature (within the legal limits). The withdrawal was 51% higher than in 2018 following the increased operation of the plant equipment. Upstream storage activities produced approximately 6,159 cubic metres of process water (+4% compared to 2018), all sent to an external purification plant for treatment.

The extraction of fresh water, used mainly at the company premises activities, for fire-protection systems and to irrigate green spaces, increased by 70% compared to 2018. With regard to water discharges, the waste water is channelled into the sewage networks (42% of the total) or discharged, after treatment, into the soil and into surface water bodies (58% of the total).
The sites that cannot be connected to the sewerage system have closed-cycle phyto-purification systems, a technology that allows domestic waste water discharges to be eliminated because they are treated and fully absorbed by the planted vegetation.

The production of waste comes mainly from plant maintenance and management activities (71%) and well drilling activities (29%). In 2019 the total production of waste stood at approximately 27,823 tonnes (-2% compared to 2018) of which more than 80% belonged to the non-hazardous waste category. 42% of waste from production activities was sent for recovery.



Social

People

For over 75 years Snam has been building energy networks dealing with new challenges in a constantly changing world by developing its most precious asset, people. Finding itself in a context of international development with a focus on new green businesses, Snam continues to invest in the training of its resources as the key to guaranteeing the continuity of technical and technological know-how. This transformation process requires the behaviour of everyone to be focused on a cultural change that facilitates the transformation process in question. This is made possible by Snam's commitment to developing the professional skills and talents of everyone in a transparent and meritocratic way and creating an inclusive work environment, where diversity and plurality encourage innovative ideas and virtuous behaviour, promoting a more motivating context, in line with company values that guide the operations of the people working in Snam.

EMPLOYMENT

Snam offers a stable, continuous working relationship (93.1% of people are on a permanent employment contract) and hires highly qualified and specialised resources (57% of employees have a technical diploma and 27% are graduates). At the end of 2019, there were 38 part-time contacts and 193 apprenticeship contracts in force. During the year there were over 32 employees on a staff leasing contract (33 in 2018 and 2017).

Snam Personnel at 31.12. (no.)

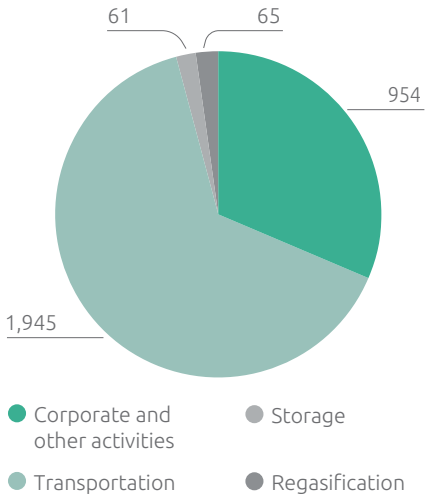
	2017	2018	2019
Executives	93	107	**111**
Managers	456	480	**493**
Administrative staff	1,655	1,682	**1,683**
Manual workers	715	747	**738**
Total Employees	**2,919**	**3,016**	**3,025**
Graduates	676	777	**819**
With diplomas	1,664	1,703	**1,714**
Other qualification	579	536	**492**

Snam Personnel at 31.12. by type of contract (no.)

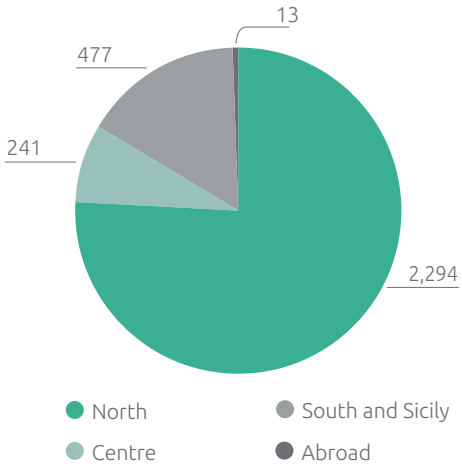
	2017	2018	2019
Permanent contract (*)	2,755	2,812	**2,817**
Apprentice or first employment contract	150	185	**193**
Fixed-term contract	14	19	**15**
Part time	42	41	**38**

(*) it includes also part-time contracts

Employees by activity (no.)



Distribution of employees by geographical area (no.)



Top Employers

The international "Top Employers" ranking by Statista in partnership with Forbes, ranked Snam among the top 150 companies in the world to work in. The list, which includes Snam and one other Italian company, is based on 2,000 global companies with the best reputation, based on 1.4 million interviews at a global and regional level.

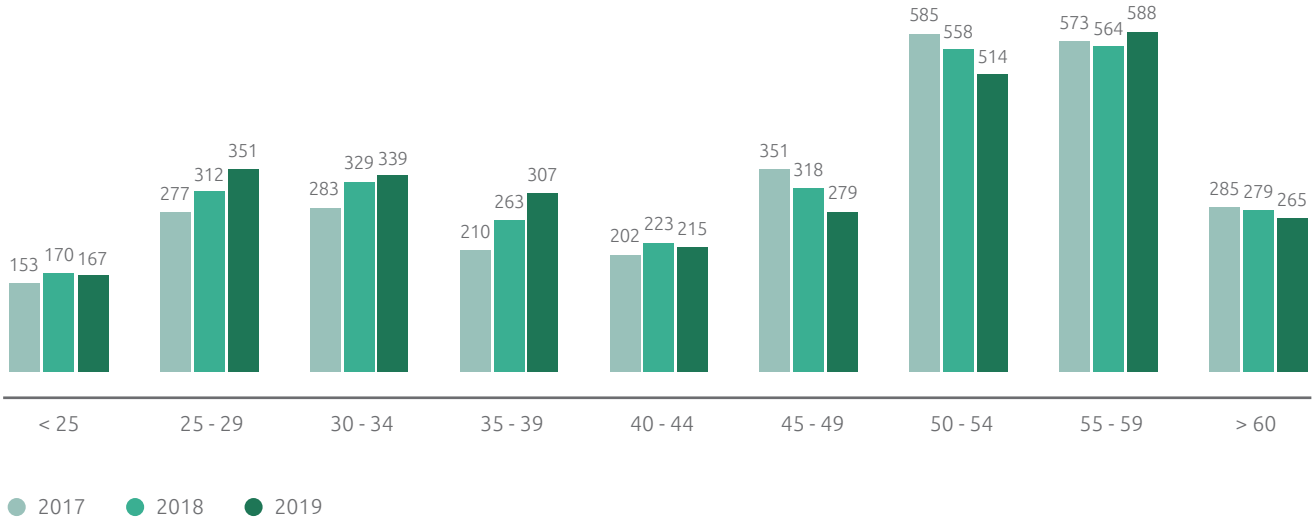
Employment dynamics

In 2019 a total of 231 entries were recorded of which 172 were hired from the market, 8 from the consolidation of the TEA S.r.l. (from December 2019), 47 from the acquisition of RENERWASTE (from December 2019) and 4 returning from leave.

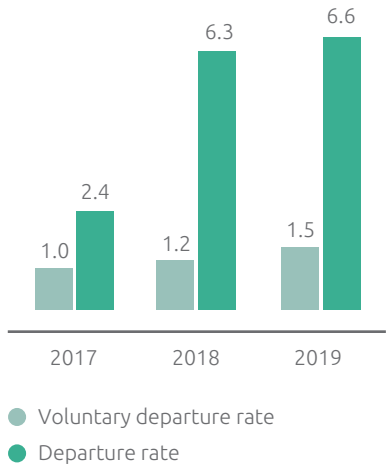
On the other hand, there were 222 departures, 77 were early retirement, 12 for other reasons, 12 transfers to non-consolidated companies and 121 through the termination of employment (53 of which were unilateral terminations).

People aged under 40(1,164) represent the 38.5% of the corporate population, an increase of 90 resources compared with 2018, also thanks to the inclusion of young talent in recent years.

Age diversity: employees by age brackets (no.)

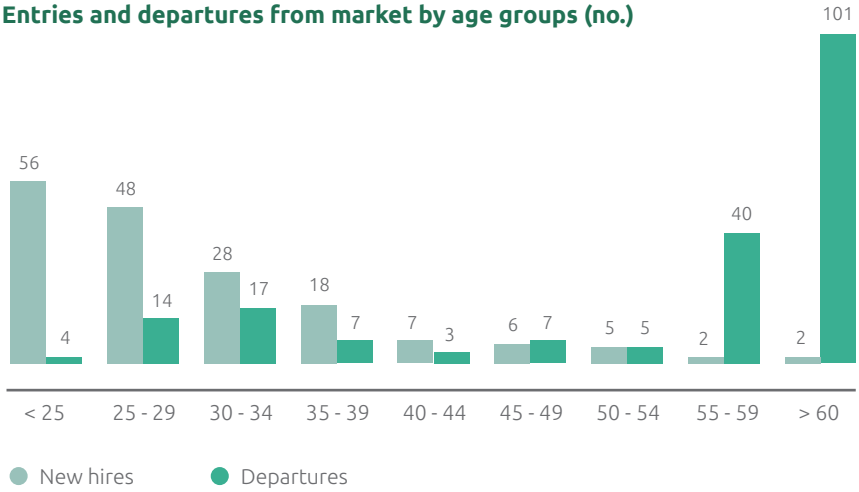


Departure rates (%)



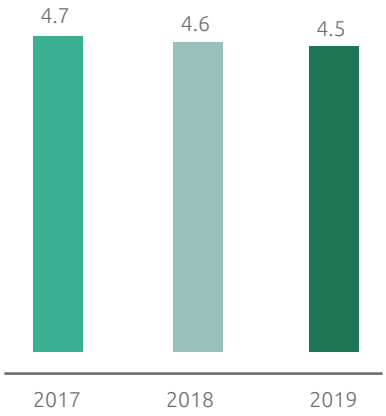
Voluntary departure rate = (departures for resignations /average headcount) * 100
Departure rate = (departures/total number of employees at 31/12) * 100

Entries and departures from market by age groups (no.)



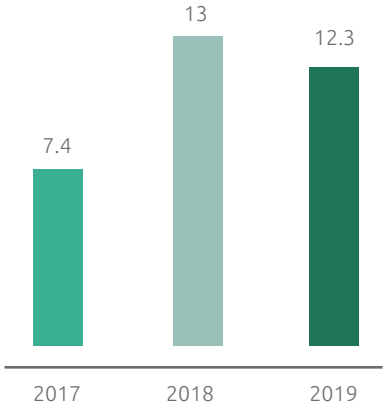
The absenteeism rate, which in 2019 stood at 4.5%, was essentially aligned to the previous years, does not include senior management and was calculated taking into consideration all hours not worked (paid and unpaid) excluding holidays, leaves and periods of mandatory and voluntary maternity leave. There were no essential changes between the absenteeism rate for men and women, which stood at 4.4% and 5,1%, respectively.
The turnover rate for 2019, remained consistent with the 2018 figure thanks to the hiring campaigns and the support of early retirement, as well as acquisitions completed during the year.

Absenteeism rate (%)



Absenteeism rate =
(hours absent/workable hours)*100

Personnel turnover (%)



Turnover =
(incoming + departures)/average headcount employed)*100

DIVERSITY

The Diversity & Inclusion policy
Snam guarantees equal dignity and opportunities for all its people regardless of their country of origin, culture, religion, gender, sexual orientation, political opinions and any other characteristic or personal trait. To promote the dissemination to employees and contractors of a culture of equal opportunities, in October 2019 a specific corporate policy was established on diversity and inclusion. The linchpins of the policy are the creation of a welcoming work environment with no direct or indirect discrimination, the application of specific policies and metrics in human resources to guarantee fairness in all phases of the working relationship, training and the work/life balance.

Snam believes that diversity and plurality are values that contribute to create an open and stimulating work environment, promote perspectives and points of view that encourage new ideas and effective and virtuous behaviour. Valuing diversity represents a vehicle for cultural transformation that strives to make the company more competitive, innovative and focused on the growth of people.

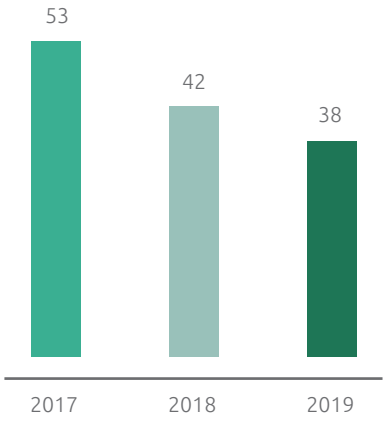
At the end of the year, the female workforce was composed of 441 employees (+5.3% compared to 2018) equal to the 14.6% of the workforce (+0.7 percentage points compared to 2018). The 89% of part time contracts involve women (34 out of a total of 38). 120 people with disabilities work at Snam and their career path promotes inclusion and integration in the company processes.

Female personnel at 31.12. (no.)

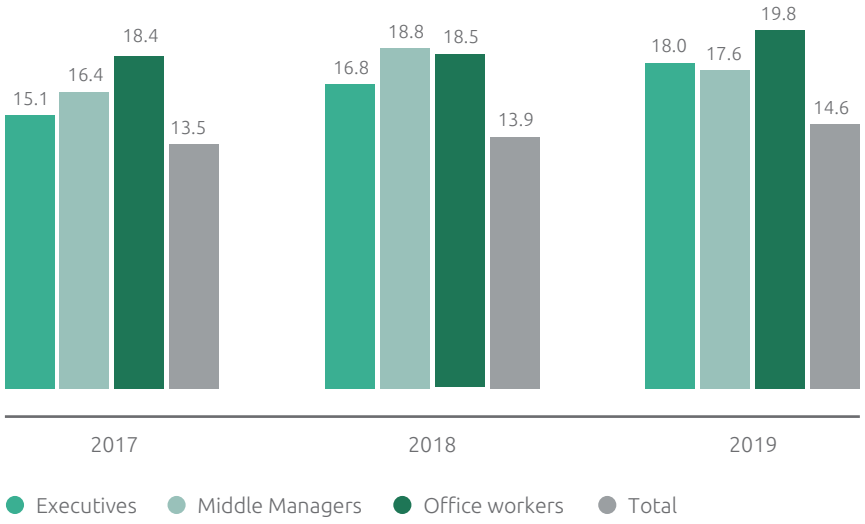
	2017	2018	2019
Executives	14	18	**20**
Managers	75	90	**87**
Administrative staff	304	311	**333**
Manual workers	0	0	**1**
Total	**393**	**419**	**441**

The presence of female employees is mainly concentrated in northern Italy (around 91% of the total) working predominantly at the San Donato Milanese premises.

Women hired from the market (no.)

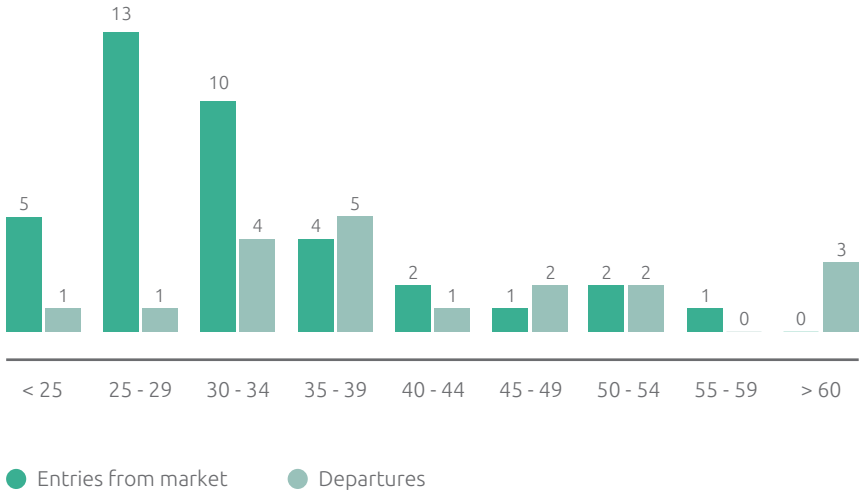


Female presence (%)



Women/men compensation differential

New entries from the market and departures for female gender (no.)



The improvement in the women-men pay gap in 2019 is due to the consolidation of the actions aimed at improving the gender balance in the company. In addition, as evidence of the Snam's commitment to guarantee gender balance, in 2019 the Shareholders' Meeting approved, with the 99% of votes in favour, a change to the by-laws, which makes the criterion of gender distribution in the Board of Directors and the Board of Statutory Auditors permanent for at least one third of the total members.

Gender diversity initiatives

Gender-Equality Index

Snam is included among the 325 global companies on the 2020 Bloomberg Gender-Equality Index (GEI). The GEI tracks the financial performance of the Companies most committed to the promotion of gender equality globally, through the development of dedicated policies and initiatives and the transparent disclosure of information.
The index is based on factors such as promoting female leadership, a commitment to reducing the gender pay gap and the culture of inclusion.

Valore D

Snam has been a Contributing Member of Valore D since 2017. A strategic decision to support company's international growth now and in the future through the increasingly strong presence of women and colleagues of other nationalities. This collaboration provided employees with the opportunity to take classes to enhance the gender, generational and cultural diversity, to develop an inclusive culture, a factor of innovation, competitiveness and growth for people and businesses. In 2019 Snam took part in the inter-company training and mentoring programmes offered by the association and 3 in-house workshops have been organised on the following subjects: Unconscious Bias, Happiness in the Company and Organisational Leadership.

InspirinGirls

This is an international campaign (promoted by Valore D) aiming to create awareness among young women of their talent freeing them of the gender stereotypes that hold back their ambitions.
The project involves female volunteers from different industries and professions sharing their professional and life experience with young girls in high school, building a practical bridge between school and the world of work. In 2019 Snam took part in the project with 70 female role models.

GROW - Generating Real Opportunities for Women

The collaboration with the LUISS Business School continued through the Job Shadowing programme which gives female students the opportunity to shadow a top Snam manager for an entire working day. The objective is to promote, support and improve the personal and professional development of women with a particular focus on joining the job market and promoting their own professional career. In 2019 7 Snam managers and 8 students were involved.

Young women @ Snam

A leadership development route was created for 20 young women working at Snam to improve their self-effectiveness and self-management, emotional intelligence for a more effective communication with their teams and enhance their leadership style.

"Women in Security"

Snam, together with the Associazione Italiana Professionisti Security Aziendale (AIPSA) (the Italian Association of Corporate Security Professionals) and Deloitte, organised the "Women in Security" initiative in Milan in June to promote gender diversity in the field of security. The event focused on comparing the human and professional experiences of women working in corporate and institutional security. During the initiative, two scholarships were awarded to young workers to attend a specialist course, organized by the University of Salento, about the security and the protection of critical infrastructures.

Support for parenting and work-life balance

Through incentives and benefits that go beyond the legally set limits, Snam supports its employees when they become parents and promotes a work/life balance in the day by day activities. For this reason, employees retain their company benefits for the entire time they are on a maternity leave and, during the compulsory leave period, they receive the full amount of their pay rather than the legally-required 80% of it.

A confirmation for an inclusive and rewarding work environment, one year after returning from maternity or parental leave, the **100% of women** stay in the company.

Staff on maternity/paternity leave at 31.12. (no.)

	2017	2018	2019
People on a maternity leave	53	59	**67**
of which women	42	45	**57**
Positions closed during the year	33	44	**46**
of which women	23	30	**36**
Positions that remained active	20	3*	**21**
of which women	19	3*	**21**
Women returning to work (%)	96	91	**100**

* Updated figure (12 females returned at the end of December 2018)

People on a parental leave at 31.12. (no.)

	2017	2018	2019
People on leave	239	254	**272**
of which women	61	43	**72**
Positions closed during the year	209	253	**238**
of which women	54	44	**62**
Positions that have remained active	30	12*	**34**
of which women	7	6	**10**

* Updated figure (19 people returned at the end of December 2018)

DEVELOPMENT OF SKILLS

In order to preserve the important heritage of its technical know-how, to develop it and transfer it to the new generations, Snam established the Skill Centres, namely groups of people across the organisational structures with consolidated and recognised know-how and expertise in specific areas that are important for the business. The main objective of the project is to monitor, develop and disseminate corporate know-how also through innovative training activities and professional development.

These centres are supported by an internal faculty of 80 employees who transfer their technical and business expertise to other colleagues through a "by Snam to Snam" approach. In 2019 the faculty provided around 1,200 teaching hours, contributing to the training of approximately 600 people.

Skill Centres

Tutoring or field visits check-list files arranged **90**

Training actions with external providers **150**

Specialized training session (designed and provided directly by the Competence Centres) **30**

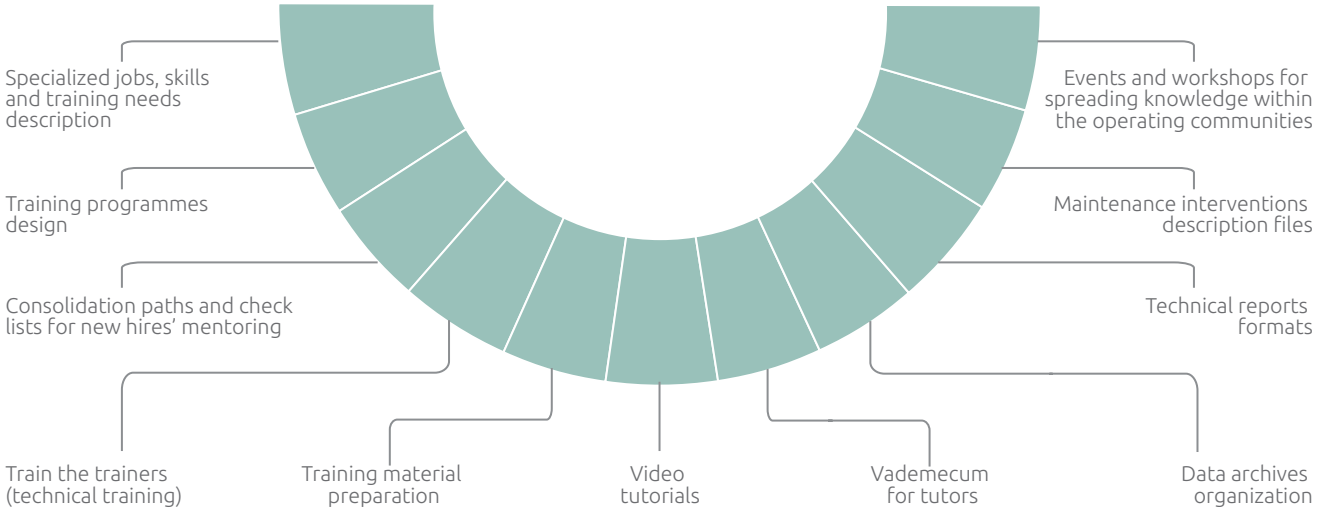
110 Employees engaged in the starting phase

175 Employees with relevant skills identified

145 Technical skills fields established

NUMBERS

PRODUCTS



Snam and the school
Snam's activities aimed at the world of the education continued with:

Young Energy, project, in its third edition, designed to facilitate the orientation of students and bring them closer to the world of work through initiatives focused on its business. At the start of the project, Snam hired 18 young people from the institutes involved and, during the current academic year, Young Energy will operate in 5 regions and 8 further education colleges, involving around 800 students in training activities.

"Thumbs Up Youth Award", an initiative dedicated to sustainable development as part of the school/work alternation project in which around 400 third and fourth grade students were involved.. Under the scope of the project implemented by the Thumbs Up association, with the support of the Cariplo Foundation and in partnership with the Università Cattolica del Sacro Cuore, Snam involved around 60 students of the Liceo Statale "G.B. Vico (Milan) in proposing solutions for energy efficiency solutions at their school.

Training

In 2019 114,179 training hours were supplied (+5.9% compared to 2018) with 26,518 participants (+89% compared to 2018) involving 99% of the corporate population. The increase is also due to the provision of e-learning to the entire corporate population with 5 modules of around 1 hour each on Compliance which dealt with the issues of Market Abuse, Privacy, Model 231, Anti-corruption and Antitrust. On average 37.7 hours per employee were provided (38.41 hours on average for male staff and 33.75 for female staff).

Personnel training

	2017	2018	2019
Training hours (no.)	85,346	107,771	**114,179**
of which executives	1,908	4,392	**5,669**
of which managers	8,600	19,072	**16,950**
of which administrative staff	39,316	49,650	**58,238**
of which manual workers	35,522	34,657	**33,322**
Participants (no.)	8,604	13,999	**26,518**
Average training hours per employee (no.)	29.2	35.7	**37.7**
Average training hours delivered to men (no.)	31.3	36.9	**38.4**
Average training hours delivered to women (no.)	15.8	28.7	**33.8**
Involvement (%)	75.4	93.0	**99.2**

Training plays a fundamental role in supporting the management and the entire company population to develop technical skills, managerial capacity and health and safety information.
Specifically, as far as managerial training is concerned, the Inspire the Future course that involved 40 managers from Snam and its subsidiaries (Desfa, Gas Connect Austria, TAG and Teréga) can be highlighted. The course, with contents and expertise aimed at encouraging a strategic vision, the capacity to promote innovation and the ability to steer personnel in transition, consisted of three modules (Leading Strategy, Driving Decisions through Innovation, Leader as a Coach & Corporate Storytelling) and at three different locations (Milan, London, Paris).
During the year around 20,291 hours of training attended by 2,916 participants were delivered on health and safety. Training on health and safety was also delivered during HSEQ courses (6,685 hours of HSEQ training with 1,505 participants). The Snam Institute signed a collaboration agreement on these topics with the Corpo Nazionale dei Vigili del Fuoco (National Fire Service) to provide training to technical personnel through courses on the safe management of gas infrastructures, fire prevention and other issues related to transportation, storage and regasification activities.
In addition, on matters of business ethics and anti-corruption, in 2019 4,028 hours of training were provided with 3,981 participants.

4.028 hours of training with 3.981 participations on business ethics and anti-corruption have been delivered in 2019

Main training initiatives

Description	Hours provided (no.)	Participants (no.)
Technical training	47,705	8,023
Health, Safety, Environmental Protection and Quality training	29,755	5,580
Managerial training	19,524	4,356

REMUNERATION POLICIES AND SYSTEMS

In Snam, merit is the basis of the administrative and reward practices, both in terms of professional development and career opportunities. At the same time it is a benchmark for people management to stick to fairness and sustainability criteria. The remuneration systems are periodically updated based on the comparison with the reference markets as well as taking into consideration information from external stakeholders. In particular, these systems are meant to ensure the recognition of the results achieved, the quality of the professional contribution provided and individual development potential of the person.

Incentive schemes for the different corporate population groups

EXECUTIVES

The remuneration system breaks down into two parts: a fixed remuneration, with possible annual adjustments for merit or progression of roles/responsibilities, and a variable remuneration with incentives to promote professional contribution in the short-term, by assigning an annual monetary incentive (IMA), as well as in the medium-long-term, by assigning a long-term share-based incentive (ILT).
Claw-back mechanisms are also provided, to recover the variable portion if the resulting compensation is not due because it was earned based on targets that were attained as a result of malicious or grossly negligent behaviour or that were proven to be manifestly incorrect.
The Total Reward Statement, an information package on the breakdown of the individual remuneration, guarantees the promotion and transparency of the remuneration system.

NON-EXECUTIVE PERSONNEL

Snam adopts a short-term variable incentive system to reward the best performances and young resources with a potential for development.
All companies in the Group anticipate a "Participation Bonus", instituted by the National Collective Labour Agreement, based on the performance of profitability and productivity parameters, measured in relation to the targets agreed upon every year between the company and the trade-union representatives.

In 2019, the second cycle of the Performance Management system was launched, which saw the expansion of the population involved to include all administrative staff on the headquarter (Corporate and Operations). As planned, in 2020, with the launch of the third cycle, the Performance Management system will involve the entire corporate population.

1,587 employees evaluated in the annual Performance Management cycle

Employees assessed in Performance Management (no.)

	Men	Women	Total
Executives	89	18	**107**
Managers	390	87	**477**
Administrative staff	744	259	**1,003**
Total	1,223	364	**1,587**

In 2019, the sustainability targets assigned were more than the previous year because there was a significant increase in the number of administrative staff within the scope of evaluation and the green business activities (Hydrogen, Biomethane, Biogas) were enhanced. These distinctive behaviours, included in the Performance Management system, demonstrate how the Company is integrating its sustainable business model with the promotion of virtuous behaviours.

Sustainability targets assigned

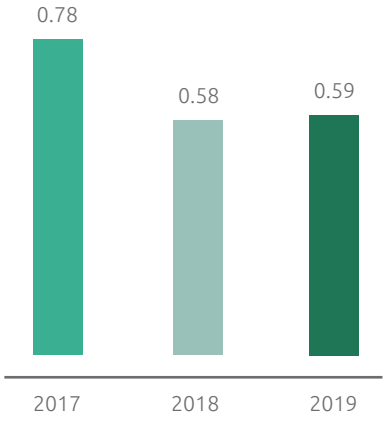
	2017		2018		2019	
	Assigned (no.)	Reached (%)	Assigned (no.)	Reached (%)	Assigned (no.)	Reached (%)
Executives	77	95	131	97	**144**	**81**
Managers	291	97	274	87	**239**	**88**
Other personnel	67	96	63	89	**377**	**84**

The Skills Model includes a training course that consists of 2 days training and a half-day follow up for each area. In 2019, 19 sessions were conducted with 204 Group people involved.
All work positions, with the exception of senior managers, are subjected to the analytical and overall evaluation of the factors of Complexity, Responsibility, Experience and Autonomy (CREA.). In 2019, 225 CREA assessments were approved.

HEALTH AND SAFETY

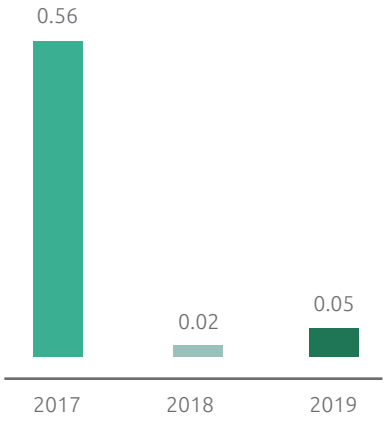
Snam is committed to health and safety protection in the workplace through actions aimed at reducing risk factors. All corporate activities are governed by management systems with OHSAS 18001 certification on health and safety at work and the adoption of good practices, promoted and shared with suppliers, has, for some years, made it possible to keep accident rates down, for both employees and contractors.
In 2019 a total of 7 accidents took place, in line with 2018, 2 of which involved Snam Group employees (4 in 2018), both of which were in companies acquired last year (IES-Biogas and Cubogas) and 5 involved suppliers/contractors (3 in 2018).

Accidents at work - Employees and contract workers frequency index



Number of non-commuting accidents with incapacity of at least one day, per million hours worked.

Accidents at work - Employees and contract workers severity index



Number of working days lost in relation to accidents at work resulting in absence of at least one day, per thousand hours worked. Data includes fatal accidents.

Accidents at work

	2017	2018	2019
Employees			
Total accidents (no.)	6	4	**2**
Fatal accidents (no.)	0	0	**0**
Frequency index	1.24	0.84	**0.41**
Severity index	0.05	0.02	**0.03**
Contract workers			
Total accidents (no.)	5	3	**5**
Fatal accidents (no.)	1	0	**0**
Frequency index	0.54	0.41	**0.71**
Severity index	0.83	0.03	**0.07**
Employees and contract workers			
Total accidents (no.)	11	7	**7**
Frequency index	0.78	0.58	**0.59**
Severity index	0.56	0.02	**0.05**

Employee workplace accidents by type of event (no.)

	2017	2018	2019
Type			
Road accidents	1	2	**0**
Occupational accidents (maintenance, inspection, checks)	1	1	**1**
General accidents (slipping, impact, tripping)	4	1	**1**

810 employees rewarded within the " Zero Accident Award" initiative

Alongside the consistent commitment through training, technological innovation and work organisation, the Snam4Safety project, launched in 2018 and continued in 2019, has made it possible to further strengthen the culture and awareness about health and safety issues among employees and contract workers.
In order to raise awareness among employees on the issue of safety, in 2011 Snam established an initiative called the “Zero Accident Award”, which, based on homogeneous teams according to employment/safety manager, rewards employees who go 365 consecutive days without an accident in the workplace. In 2019 8 teams out of a total of 810 employees were rewarded.

Snam has also extended the awareness raising activities on health and safety outside of its corporate boundaries through the “Trofeo Sicurezza Appaltatori” (Contractors' Safety Prize), dedicated to contractors with the aim of focusing the attention of suppliers on these issues. Specifically, as part of this initiative, the performance of businesses is evaluated by collecting and analysing specific indicators (such as, for example, accident indices and negative feedback on topics of interest). In 2019, the Contractors Safety Prize (for results achieved in 2018) was awarded for the third year in a row to Max Streicher, a company specialised in the building of energy infrastructure, more specifically gas pipelines.

HEALTH PROTECTION

The health of workers who, depending on the task performed, are exposed to specific risk factors, is monitored through health surveillance activities carried out by dedicated health professionals. To guarantee a work environment that meets occupational hygiene standards, environmental surveys are periodically conducted aimed at monitoring micro-climate, biological and physical aspects of the locations. In addition, Snam absolutely prohibits the drinking of alcoholic beverages while at work. After a year in which no reports of any kind were received, one case of an occupational illness was reported in 2019 which is being investigated.

Health monitoring (no.)

	2017	2018	2019
Medical visits	1,914	1,350	**1,984**
Periodic medical visits	1,688	1,061	**1,747**
Diagnostic examinations	3,508	2,020	**3,261**
Environmental surveys	279	247	**243**

Lastly, also Snam promotes various health improvement initiatives directed at employees through its corporate welfare system. The description of the services offered, together with the other welfare activities, are reported in the next chapter "The innovation behind the company's welfare system”.

Workers subject to periodic medical surveillance (no.)

	2017	2018	2019
Total employees exposed	2,646	2,652	**2,742**
Employees exposed for VDT	1,817	1,923	**2,027**
Employees exposed for emergency cover	627	599	**594**
Employees exposed to chemical agents	52	10	**65**
Employees exposed through moving loads manually	5	94	**136**
Employees exposed through night time work	109	113	**113**
Employees exposed to noise	24	24	**53**
Employees exposed through the synergy of several risks	609	587	**690**
Employees exposed in confined spaces*	119	139	**176**
Employees exposed for other reasons (IE, abroad, TOX, welding)	78	127	**194**

* Protocol with a new name that groups together the two protocols of previous years: "Employees (workers) with operational duties" and "Work in compression plants"

INNOVATION IN THE COMPANY'S WELFARE SYSTEM

The company's welfare system is a collection of interventions, both monetary and in the form of services, which increases the level of social protection and the purchasing power of employees and which can indirectly generate a positive impact on the corporate population.
From 2018 the Welfare Plan has been developed on a digital platform called "Snammy" based on five areas: Family, Education, Work/Life Balance, Well-being and leisure time, Health. Five areas and 28 services (including corporate and contractual) to meet the current needs and requirements of the company.
Among the most interesting new features the "BE PARENTS" programme stands out, an online training created in partnership with "Life Based Value", that accompanies new parents during and after the birth of their child, to transfer the skills acquired as parents to their work activities. In its first year 66 employees joined the programme (of which the 45% are women).
In the Family area there are the digital education courses for parents and children on technological culture topics and the "dediCARE" service which helps to resolve big and small family problems, from assisting old people to tutorials, to babysitting.
In the Well-being and leisure time section, in addition to the arrangements with leading health institutions and prevention programmes, SNAMMYBENE continues, the project is dedicated to the well-being of employees in its various aspects: diet, cognitive-emotional and financial.
Regarding the flexible working, the Smart Working programme was extended both in terms of scope of application and the number of hours, going from 62,930 hours in 2018 to 122,762 in 2019. This initiative is supported by flexible working hours forcoming in and leaving the office premises during normal working days, and "short Fridays", where the working day can end from 13.00 onwards.
The "FLEXIBLE BENEFITS" system continued. It increases the purchasing power of employees who join the initiative, transforming a share of the participation bonus (a maximum of 60%) into welfare credit that can be used to buy services supporting personal health, for school and for education, for cultural and sports activities, for travel, mobility and supplementary pensions for oneself or one's family. The advantage of transforming part of the bonus into welfare credit consists in the fact that there is no tax due on this sum and the company awards to the employee a further bonus that increases proportionally from 8% to 16% based on the share converted.

The Snam's corporate welfare system

Areas		Activities
Family	Nursery	Refund of registration fee for children of employees
	dediCARE	Social welfare service for children, old people, the disabled, etc., developed courtesy of the partnership with regional cooperatives of the voluntary sector
	Summer and study camps	Summer stays for children of employees in Italy and abroad
	Family S.O.S.	Professional family counselling service
	Micro-credit	Subsidised rate loans with major credit institutes
	Ask the expert	Service for legal and tax queries
	Motherhood, child adoption and custody	Be Parents programme, Parenting guide
Health	Insurance	Insurance coverage for non-occupational accidents
	Supplementary healthcare	Health insurance coverage that guarantees a portion for the reimbursement of expenses incurred for medical and hospital services at public and private healthcare facilities
	Medical prevention	Prevention protocols at approved medical centres
	Specialised medical services and check-ups	Arrangement with Monzino Cardiology Centre for visits intended for employees and their family members
	Flexible working schedule	Smart Working, short Fridays, individual hours account
	Mobility	Subsidised purchase of public transportation passes; shuttle service to San Donate Milanese
	Mobility portal	Traffic information, mobility app
	Company restaurant	High-quality company restaurant and takeaway service
	Special rates agreements	Special rates for insurance policies, bank credit cards, car hire, purchase of branded products, holiday bookings, methane car purchase agreements
Well-being and leisure time	Sports centres	Arrangements for sports activities at favourable conditions
	Supplementary pension	Supplementary pension funds, also funded by employer contributions
	Snammy bene	Awareness raising courses on individual well-being issues
	Snam Senza Frontiere (without borders)	2 corporate team building events: winter games and summer games
Education	School	Subsidies to buy school text books, scholarships for children of employees and loans for study expenses
	Talent days	Work orientation courses for the children of employees
	Code Generation	Training for employees and their children to stimulate different approaches to the use of the web through the creation of a video game.
	Digital education	Digital education courses for employees and their children

INTERNAL COMMUNICATION

Snam continues to promote direct and ongoing communication with its people, through an internal network of information flows aiming at disseminating information and know-how with the goal of making the Company's goals clear and sharing them, bolstering team spirit and increasing the level of participation. Communication in 2019 focused on the enrichment of contents and the introduction of new initiatives, information activities and formats and the involvement of people, also thanks to the collaboration with the Snam Foundation. This collaboration makes it possible to match social commitment with strengthening team building and relations between people in line with the company values.In this context, the "Volunteering day" and the "Christmas with the family" initiatives continued, the first one with employees also being able to get friends and family involved in the initiative and the second one, which took place with the support of non-profit organisations, was dedicated to employees with children working in 11

different locations in Italy. The "Match giving"initiative was also introduced, a financial solidarity activity in which the Snam Foundation doubles every monetary contribution made by employees. As far as the information format is concerned, the spread of streaming and webinars for events has allowed the Snam Institute to develop a training initiative plan that is accessible to everyone through the company intranet with the objective of disseminating the issues of sustainability, talks on climate change to the open journey on the issues of Diversity & Inclusion and take an in-depth look into important themes through comparison with other companies or experts.

Channels and main internal communication activities in 2019

"Easy" the intranet portal	Hard copy instruments and video screens	Meetings for sharing and engagement
The portal is available to all the company personnel. It is a website for information and raising awareness and a tool for sharing know-how and moments of work. In 2019 the **"Agile re-design"** project was launched for the creation of the new portal, which involved around 80 employees through focus group activities as they are the intended users. The new version of the portal will be available from the second half of 2020.	The magazine **"Energie"** represents the company's corporate identity and is the voice of the main events during the year. The spotlight in 2019 was on new businesses. **"Speciali Energie"** (Energy Specials) are attached to the "Energie" magazine or distributed independently, focusing on specific topics. As well as the **"Osservatorio Domanda Gas"** newsletter, with news, analysis and comments on gas demand, a new, two-monthly newsletter was created, **InRete,** about the transportation network activities.	With an **Online Webinar** presenting the strategic plan, the CEO illustrated the pillars of the new plan, directly answering the questions posed by employees. **"Auguri In Rete"** is the end of year event with video-conferencing with the 10 Italian regional offices and the 4 foreign headquarters (Tirana, Athens, Vienna, Beijing). During the 2019 event, efforts were focused on corporate sustainability. The **Pulse Survey** was sent to all employees to evaluate company initiatives. The results were presented to the CEO via a webinar and, later on, focus groups were organised, with 420 people involved to identify improvement measures. The second edition of the initiative **#Storiedivalore** is part of the activities for communicating the company's values and business purpose. The 4 colleagues winning the contest flew to Dublin and visited the Linkedin headquarter.

INDUSTRIAL RELATIONS

In 2019 Snam maintained ongoing relations with the Trade Unions both at a national and at a local level through many meetings dedicated to comparing various business development projects already consolidated and those launched recently.
Specifically, the "Integra" project concluded the integration journey between the commercial and physical Dispatching, optimising transportation and storage activities. The work of the "Smart Gas" and "Smart Gas Plants" projects technical committee continued, seeking a more rational scheduling of the operations with the objective of analysing the technical aspects of the projects. The "Tracking Vehicles" project was introduced through a trade union agreement that allowed the pool of vehicles involved in transportation activities to be fitted with a tracking device which is helpful to monitor the network and the assets in general.
Regarding the regasification business, meetings were held with the Trade Unions, nationally and locally, in order to share and discuss topics involving the business development.
The discussion continued for the definition of productivity and profitability indices for Performance-Related Pay for 2019 for all the Group companies and the good results for the 2018 bonus were recorded. All the Group companies signed the implementation agreement pursuant to Article 4 of Law 92/2012 for the early departure in 2019 of an additional 110 employees who were eligible. The parties signed the new trade union agreement on smart working methods extending it to the entire corporate population.

Labour disputes (no.)

	2017	2018	2019
Total disputes pending at 31.12	29	13	**13**
Opened during the year	32	51 (*)	**15**
Closed during the year	12	67	**15**

(*) 46 disputes filed in 2018 are to be attributed to joint responsibility in procurement

Snam Foundation

In over 75 years of history, Snam has contributed to innovation, progress and social growth in Italy, constructing and managing complex infrastructures. Inspired by the Snam's infrastructure mission, working for the development of the social system through the construction of networks and listening directly to stakeholders, the Foundation makes corporate, methodology and managerial expertise available as well as the ability to attract investments and develop relational networks.
The Snam Foundation plans to redevelop the most vulnerable areas of the country, specifically by protecting and looking after the landscape and environmental heritage, as well as developing cultural and social activities in every expression.
The Snam Foundation, acting as a system integrator, promotes specific initiatives in different areas putting itself forward as a connecting element between Snam and the social sector.

"Tesori - Terre Solidali in Reti Inclusive"

An initiative launched in conjunction with Confagricoltura in 2017 to use certain Snam company assets, in particular unused land, making them available to local communities to implement projects that disseminate practices of social inclusion for frail subjects, associated with the agricultural sector.
In 2019, projects were supported in 2 areas, Recanati and Ronco all'Adige. In the former, a small industrial pasta factory was created, which will house students for professional internships and educational workshops, while in the latter, structures were installed for pet-therapy activities and hydroponic cultivation, aimed at supporting the rehabilitation of people with mental health difficulties.

Cortile dei Gentili

The Cortile dei Gentili is an initiative of the Pontifical Council to support children from disadvantaged areas.
In 2019 the Foundation supported two of the main initiatives of the Cortile aimed at collecting funds in the cities of Milan and Rome. The Foundation also took part in the organisation of "Treno e della nave dei bambini", an initiative in which 400 children from disadvantaged areas of Liguria, Sardinia and Campania were taken to meet the Pope.

Corvetto Adottami

A three-year initiative involving local communities to contribute to the redevelopment and social development of the Corvetto district of Milan. The programme involves three areas: social innovation, fighting education poverty and improving the environment and energy efficiency.
The project aims to consolidate existing initiatives in the area together with the Cariplo Foundation and, specifically with the "LacittàIntorno" and "Qubì" projects, with the Municipality of Milan and the network of local associations.
In 2019, workshops were launched for social inclusion at the Candia institute and activities were launched for directing and supporting young people not in education or at work (NEET*), and young people (aged between 14 and 17) at great risk of dropping out of school. In addition, in a joint project with a network of its regional parties and suppliers, Snam created the "Tappeto Volante" (Magic Carpet), an urban regeneration project that unites the Tommaso Grossi Institute with the Emilio Alessandrini Park.
In November 2019, on the Company Volunteering Day, Snam and the Foundation brought together over 60 people including colleagues, students of the Polytechnic and startuppers in a hackstorm dedicated to creating a sustainable business model for the social partnership committed to redeveloping the covered market in piazza Ferrara.

* Not Engaged in Education, Employment or Training

Employee Engagement & Volunteering Day

In 2019, various initiatives were organised which led to Snam people making their expertise and efforts available to voluntary sector bodies as part of projects of the Foundation and specific initiatives such as "Volunteering Day". The second edition of the latter was organised. Compared with the previous year, participation was doubled, it lasted two weeks and was open to the families and friends of employees and Snam's partners. 750 volunteers signed up, 600 of them employees and 150 family members, university students, start-ups, partners and suppliers. More than 6000 hours of volunteering were supplied to 70 organisations in the voluntary sector spread over 60 locations in Italy.
The Solidarity Award was introduced as part of "Volunteering Day" giving Snam volunteers the opportunity to choose one of the projects presented by the 8 organisations that received the greatest number of submissions, and allocating an extra contribution of €5,000. The AISM (Associazione Italiana Sclerosi Multipla - Italian Association for Multiple Scelerosi) project "Senti come mi sento" (Feel like I feel) won the award.
In 2019, the Foundation doubled its contribution, collected through crowd funding initiatives, handed out money to 7 projects promoted by Snam employees, contributing a total of around €17.5 thousand. An incubation process to support a selected project was also funded.

ForestaMI

The Snam Foundation supports the Municipality of Milan's "Forestami" project aimed at planting 3 million trees by 2030 in two stages, with 2 million planted by 2026. This is a project on a vast scale that proposes to have a strong impact on increasing the Milan urban area and hinterland's resilience to environmental stresses and the effects of global warming. Specifically, the Snam Foundation will plan strategic forestation activities in dedicated areas identified with the Municipality of Milan and will provide financial support to the initiative in partnership with Tep Energy Solutions.

Sprint! The school one step ahead

The Sprint! project promotes an alliance between schools, families and players in the area, such as voluntary sector bodies. The objective of the project is to create an experimental model to fight educational poverty for young people and prevent forms of hardship for children, removing the economic, social and cultural obstacles that prevent the educational processes from being fully exploited. In 2019 the project, co-funded with Impresa Sociale con i Bambini, was launched in the 3 cities involved: providing fun and recreational activities for parents and children in Palermo, organising sports activities in Milan and signing a memorandum of understanding for the modelling of good practices and the definition of the measures with the Municipality of Brindisi.

Welfare, che impresa!

A competition promoted by the Fondazione Italiana Accenture, the Snam Foundation, the Bracco Foundation, the Fondazione Con il Sud and UBI Banca, where 250 ideas were submitted, and 12 finalists were chosen. The Snam Foundation hosted a 2-day educational workshop at San Donato Milanese for the finalists and funded 2 of the winning start-ups with a financial prize and mentoring. The 2 start-ups recognised by the Snam Foundation were "Playrech", an urban game app for the redevelopment of cultural heritage and "Tailler delle Terre" which uses manufacturing waste to produce crockery.

The total value of acquisitions made by Snam nationally in 2019 was equal to around €1,300 million, more than 83% of its total procurement.

The supply chain

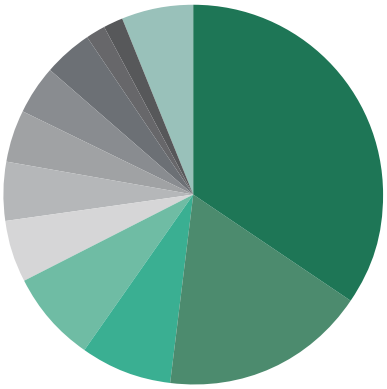
A CLEAR VISION FOR THE SUPPLY CHAIN

Snam founded its development model on sustainable growth and the dissemination of respecting environmental, social and economic aspects, turning them into an integral part of its strategic decisions. Given the plurality of the activities carried out, careful management of the supply chain is an essential element of this model. Identifying and recognising new suppliers in line with this vision and encouraging historical suppliers to commit to actions that go beyond complying with efficiency and quality requirements, but which lead to advantages for the environment and society, is the right route for setting an example and being an important point of reference along the entire supply chain.

PROCUREMENT NUMBERS[5]

The numbers relating to relations with suppliers describe the connection between the Company and the economic framework in which it operates. In 2019, 896 procurement contracts were concluded with 600 companies (+11% compared with 2018), 424 belonging to the SME sector (+6% compared with 2018). The total value of contracts stood at €1,550 million (€1,300 million in Italy), up 2% compared with 2018. Of these, 60% involved Small and Medium Enterprises (SMEs), which represent one of the main players of the Italian economy and which, thanks to their capacity to adapt to the needs of customers and their extensive distribution throughout the area, are particularly qualified to collaborate with Snam and to cope with its requirements.

Geographic breakdown of procurement in Italy (%)



- Lombardy (34.6)
- E. Romagna (17.4)
- Marche (7.8)
- Piedmont (7.7)
- Tuscany (5.5)
- Friuli Venezia G.(4.9)
- Lazio (4.5)
- Campania (4.2)
- Abruzzo (4.0)
- Veneto (1.8)
- Liguria (1.6)
- Other regions(6.0)

Procurement (millions of euros)

	2017	2018	2019
Value of procurement*	844	1,520	**1,550**

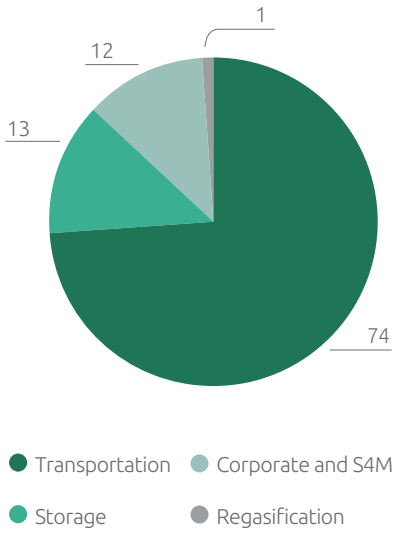
(*) The value of the procurement is calculated allocating the entire value of each contract in the year it was concluded.

Suppliers are classified into 3 different product categories, namely goods, services and works, which in 2019 represented 34%, 30% and 36%, respectively, of total procurement.
In the product category of goods, steel, by weight, is the most used material at over 86 thousand tonnes. Specifically, steel comes from the purchase of pipes, valves and connectors which are mainly needed for gas transportation activities (activities which, in 2019, covered 74% of total procurement).

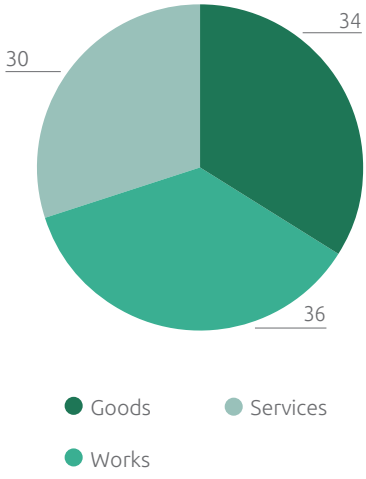
5) Unless stated otherwise, the data in this chapter refers to the following Companies: Snam S.p.A., Snam Rete Gas S.p.A., GNL Italia S.p.A., Stogit S.p.A. and Snam 4 Mobility S.p.A..

The categories of products that are, in turn, broken down into four criticality classes (A, B, C, D), depending on their pertinence to the core business, strategic importance, technological complexity and impact on performance. Classes A and B represent the most critical product categories for Snam's activities and, in 2019, involved 137 suppliers, equal to 60% of procurement. Suppliers belonging to these criticality classes, once classified, are subject to greater controls and monitoring by Snam.

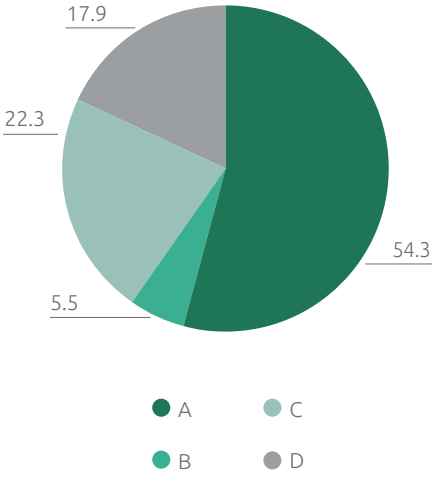
Procurement by business segment (%)



Procurement by goods type (%)



Breakdown of procurement by critical class (%)



The numbers of the new business companies

In 2019 as far as IES Biogas, TEP Energy Solutions and CUBOGAS were concerned, a total of 1,012 suppliers were qualified, 918 of which with at least one contract out of a total of 1,031 contracts issued. 891 of total suppliers were classified as small and medium sized enterprises (SMEs).

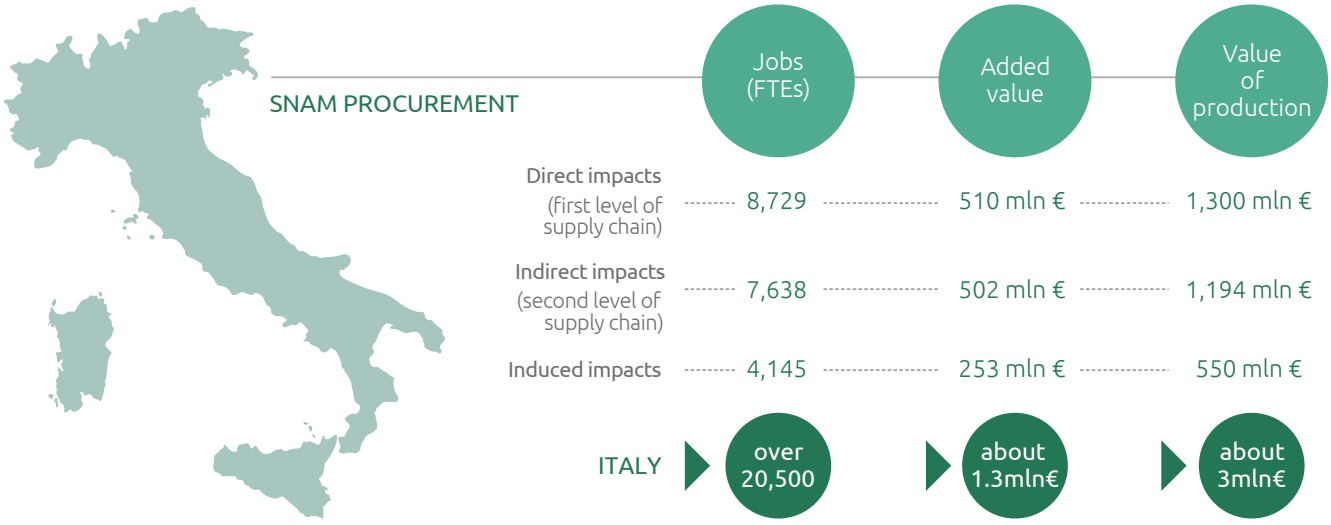
The social and economic impacts of procurement in Italy in 2019

- **1 mln€** of Snam procurement **generates 1.03 mln€** of total added value in the chain and in new consumption
- **1.7** jobs in total supported fo**r every 100,000 €** of Snam procurement

From a geographical perspective, Snam suppliers are distributed throughout Italy, concentrated in Lombardy (35%) and Emilia-Romagna (17%). Procurement activities therefore constitute an important driving force for activating the domestic economy and employment, setting in motion a series of economic flows that transfer wealth from the economic system of companies in the supply chain to the domestic economic system.
The impact of procurement decisions can be measured in terms of the number of people employed, the value of production and added value, generated by the purchase of goods and services along the first level of the supply chain (direct impacts) and in sectors activated by first level suppliers (indirect impact). In addition, the wealth introduced into the economic system through the final consumption of employees, activated directly and indirectly by acquisitions, generates further employment and added value.

The total value of acquisitions made by Snam nationally in 2019 was equal to around €1,300 million, more than 83% of total procurement. This generated:

- around €3,000 million in value of production, from the sum of the value generated along the supply chain to create the goods and services and the value created in an induced manner, namely the wealth produced by the final consumption of employees along the entire supply chain;
- around €1,300 million of added value (contribution to the Gross Domestic Product of Italy);
- more than 20 thousand full time external jobs for a year (employment impact).



The data was calculated taking into consideration the following Companies: Snam S.p.A, Snam Rete Gas S.p.A, GNL Italia S.p.A. S.p.A, Stogit S.p.A and Snam 4 Mobility S.p.A..
The data reported are the result of a specific study conducted with the collaboration of a specialist company

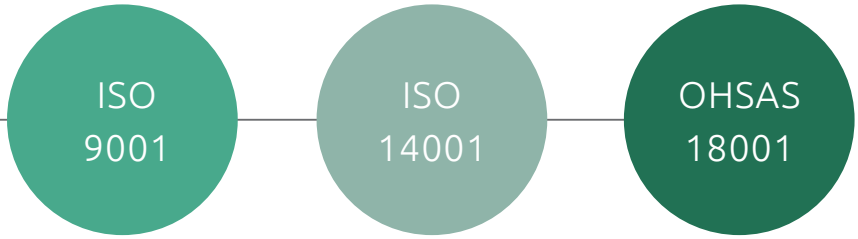
THE RELATIONSHIP WITH SUPPLIERS: FROM QUALIFICATION TO THEIR MONITORING

Qualification

To guarantee a stable and long-lasting relationship with its supply chain, Snam acts ahead of the procurement process, paying a great attention when evaluating the suitability of aspiring suppliers.
The qualification process is aimed at verifying the current capacity of the supplier and its future potential, in accordance with the criteria such as objectivity, transparency and traceability of the evaluations made. There are many factors subject to evaluation: technical and management skills, economic and financial reliability, ethical and reputational risk, commitment to anti-corruption, environmental protection, the promotion of healthy and safe working conditions and the absence of forced labour and economic exploitation of minors. Specifically, there are further requirements for the most critical product categories, such as, for example, a management system certified in accordance with international standards such as ISO 9001 and 14001 and OHSAS 18001.

International standards

requirements for the most critical product categories



Throughout the supplier selection and qualification phase, Snam, in line with the Social Supply Chain policy published in 2018, promotes the inclusion of companies belonging to the voluntary sector, such as cooperatives, non-profit companies and associations, incentivising its suppliers to, in turn, adopt similar practices and thereby multiplying the effect. In 2019, new social businesses joined the vendor list and were awarded contracts for the provision of services worth over €300 thousand.
In particular, these social useful players are involved in activities such as gardening services, the digitalization of corporate processes and catering services. Snam, thanks also to the support to external specialized providers, is committed to increase the number of these social useful players to be involved in these activities.

In order to ensure the adequacy of the pool of suppliers in terms of current and future procurement needs, Snam is constantly conducting market intelligence research and scouting for new suppliers. The streamlining of procedures carried out in 2019 made it possible to considerably reduce the time needed to complete the entire supplier qualification process. Specifically, during the year, the number of spontaneous applications receiving from aspiring suppliers was 980, 260 of which were contacted regarding approximately 70 different product categories and 110 new applicants were qualified.

+42% of qualified suppliers in 2019 compared to 2018

At the end of 2019 a total of 2085 suppliers were qualified (+42% compared to 2018) and the qualification of 722 existing suppliers was renewed or newly qualified (+18% compared to 2018).

CDP supply chain program

Snam also joined the CDP Supply Chain Programme in 2019 in which 35 strategic suppliers disclosed their data on greenhouse gas emissions (Scope 3 indirect emissions). The CDP will award a score by analysing the data received and this will be the incentive for the management of future environmental impacts.

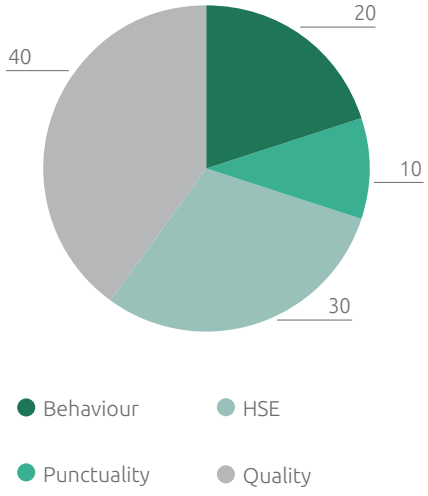
Performance monitoring

Snam is committed to involve its suppliers in pursuing its objectives and integrating them in their business model, by constantly monitoring and checking performance and requirements.
The monitoring of performance, inspection visits and evaluation processes, are the main tools used to protect the integrity of the supply chain and to ensure that the expected quality and efficiency standards are maintained. 937 feedbacks were collected during the year (+14% compared to 2018) about the performance of 117 suppliers and 3959 checks on the taxpaying of 1913 suppliers and sub-contractors were carried out (irregularities were detected in the 2,3% of the examined cases).

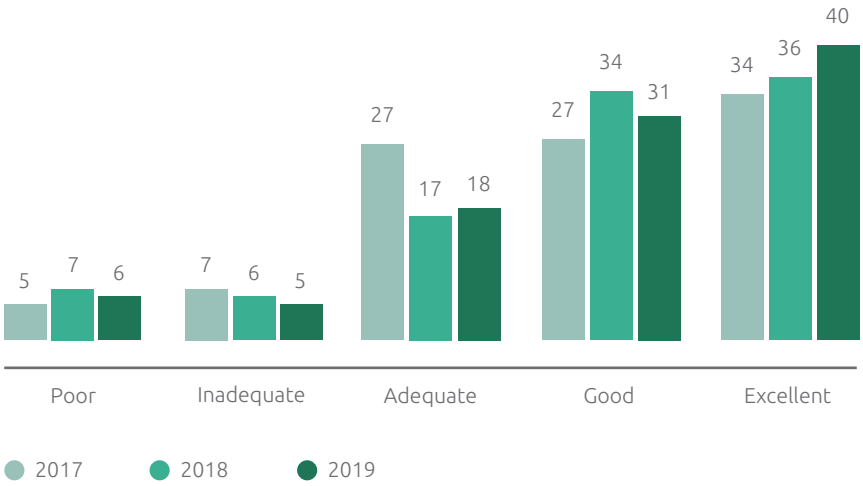
To evaluate the performance of suppliers, Snam uses a rating index (IR) that takes into consideration the compliance to the technical contractual requirements (Quality), the health-safety-environment features (HSE), the agreed delivery times (Level of service) and the ability to establish a good relationship with customers for the entire duration of the contract (behaviour). The evaluation is periodically sent to suppliers in the form of analytical ratings defined on the following evaluation scale: poor, inadequate, adequate, good, excellent. In 2019, the rating "excellent" increased by 4 percentage points, which proves the effectiveness of sharing the Snam's know-how and best practices along the entire supply chain.

Snam may restrict, suspend or even revoke the qualification of a supplier who fails to meet the agreed standards. Some examples could be a supplier failing to meet the technical-organisational requirements, a negative performance of a supplier or its subcontractors, the non-compliance with the provisions on taxpaying and the rules of the Snam Code of Ethics. In 2019, 41 measures were adopted (+17% compared to 2018).

Rating Index -Assessment areas (%)



Supplier performance assessment (%)



Supplier sustainability analysis

	Number [1]			Employment practices [2]			Environmental criteria			Human rights [3]		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Goods												
Qualified suppliers	533	495	**940**	60%	45%	**22%**	60%	45%	**22%**	100%	100%	**100%**
of which criticality classes A and B	113	105	**101**	100%	100%	**100%**	100%	100%	**100%**	100%	100%	**100%**
Suppliers qualified in the year	46	85	**126**	65%	35%	**29%**	65%	35%	**29%**	100%	100%	**100%**
of which criticality classes A and B	15	9	**10**	100%	100%	**100%**	100%	100%	**100%**	100%	100%	**100%**
Works												
Qualified suppliers	250	244	**383**	87%	65%	**46%**	87%	65%	**46%**	100%	100%	**100%**
of which criticality classes A and B	68	81	**81**	100%	100%	**100%**	100%	100%	**100%**	100%	100%	**100%**
Suppliers qualified in the year	39	59	**109**	95%	59%	**72%**	95%	59%	**72%**	100%	100%	**100%**
of which criticality classes A and B	24	17	**14**	100%	100%	**100%**	100%	100%	**100%**	100%	100%	**100%**
Services												
Qualified suppliers	1,177	1,066	**1,316**	38%	37%	**26%**	38%	37%	**26%**	100%	100%	**100%**
of which criticality classes A and B	85	91	**55**	100%	100%	**100%**	100%	100%	**100%**	100%	100%	**100%**
Suppliers qualified in the year	163	265	**377**	33%	28%	**25%**	33%	28%	**26%**	100%	100%	**100%**
of which criticality classes A and B	9	19	**10**	100%	100%	**100%**	100%	100%	**100%**	100%	100%	**100%**
Non-EU international projects												
Qualified suppliers	------	7	**9**	------	100%	**100%**	------	100%	**100%**	------	100%	**100%**
of which criticality classes A and B	------	0	**0**	------	0	**0**	------	0	**0**	------	0	**0**
Suppliers qualified in the year	------	7	**4**	------	100%	**100%**	------	100%	**100%**	------	100%	**100%**
of which criticality classes A and B	------	0	**0**	------	0	**0**	------	0	**0**	------	0	**0**

(1) A supplier may hold several qualifications for different categories.
(2) Aspects relating to health and safety
(3) Aspects relating to ethics (regularity of social security contributions/DURC, Law 231, child labour, forced labour, etc.).

Main results:

- **48%** of companies promote initiatives for personnel to **disseminate the awareness of sustainability issues**
- **58%** of companies support **social and environmental projects to promote local areas** or make donations to non-profit associations / organisations
- **70%** of companies use criteria to evaluate the **ethical-environmental performance in the selection of suppliers**

Supplier sustainability survey

As a proof of the integration of the sustainability aspects into the evaluation of the supply chain, in 2019 a questionnaire was sent to over 2,000 businesses. The focus was on issues involving the social and environmental responsibility of the businesses, the relationship between buyers, suppliers and customers, the relations with businesses in the voluntary sector and interaction with local communities.

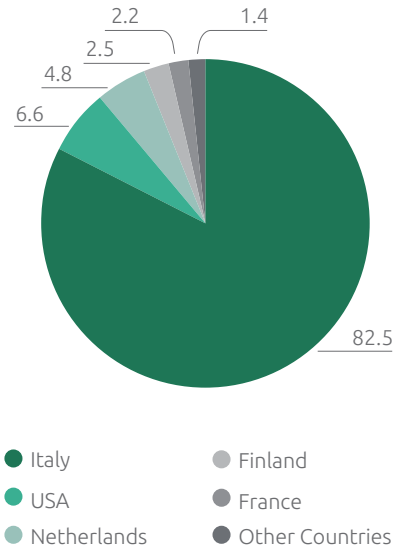
The answers, received from a sample of suppliers corresponding to over the 60% of the 2018/2019 procurement, made it possible to outline a global vision of the relationship between the supply chain and the adoption of sustainability principles and to assess its development potential.

The questionnaire was followed up by a focus group dedicated to suppliers in which Snam's sustainability model was presented and the issues that emerged in the questionnaire were discussed.

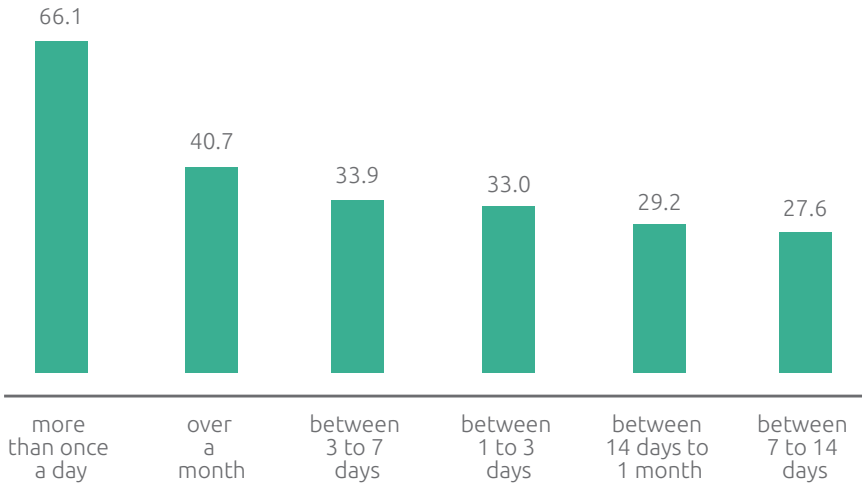
Communication with suppliers: the dedicated web portal

The establishment of a stable relationship of trust between Snam and its suppliers can only come from an ongoing and transparent communication. For this reason, since 2013, Snam has made a dedicated web platform available for them.
The suppliers portal represents the main tool used by the Company to implement its procurement policy, in total transparency, with the information published being total trackable. It contains documents, best practices, updates on the processes and procedures that regulate the qualification and procurement and the investigation activities (more than 713 thousand pages read in 2019, +51% compared to 2018).
All suppliers that registered in the portal have a dedicated reserved area available with information that involves them directly (the product categories for which they are qualified, the active contracts, the performance in terms of workplace safety, the notifications for the invoicing of the services provided).
The supplier portal is a tool constantly evolving and growing: the new features introduced every year improve its efficiency and stimulate the frequency of the interaction of the suppliers with Snam.

Geographical breakdown of the access to the suppliers portal



Frequency of access to the suppliers portal



The increase in the main tracking indices shows that the portal is popular among suppliers:
- more than 2,069 suppliers were registered at 31.12.2019
- 1,881 users entered the portal at least once a year (+33%)
- 23,952 communication emails were sent to suppliers (+104% compared to 2018)

The regulation and quality of services

Snam is committed to provide and improve its services for customers with a view to efficiency, continuity, transparency, quality and a focus on the market, promoting collaborative relationships with regulators and institutions and guaranteeing adequate economic returns to make the investment strategies sustainable.

The **tariff criteria** are usually defined every four years and guarantee the coverage of operating costs, depreciation/amortisation and a fair remuneration of net invested capital.
There are also differentiated incentives depending on the type of investments made during each regulatory period.
Every year each Snam company formulates a tariff proposal which is submitted to the Authority for approval.

Regulation in Italy

Tariff regulation is an essential element capable of developing the infrastructure capital from an economic perspective, necessary to direct investments to the network. To date, the 96% of Snam revenues are from regulated activities.
Snam interacts actively with the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) as follows:

- responding, directly or through trade associations, to **public consultations** that the Authority holds in relation to the various activities of the industry, in preparation to define new standards or to review the standards in force;
- participating to the **technical round tables** established by the Authority, regarding the development of the regulatory framework;
- drafting amendments to the Transportation, Storage, and Regasification Network Codes, subsequently submitted to the Authority for approval;
- participating to the collection of data and to the investigations carried out during the year to assess the state of the industry or of the individual services and to periodically send the data requested in compliance with the reporting obligations.

In 2019, Snam contributed to the development of the regulatory system by providing the Authority with several contributions and proposals. Specifically, the activity involved the definition of tariff criteria and the quality of the transportation, storage and regasification services for the fifth regulatory period, both as part of the public consultation processes and through specific meetings. In this context, given Snam's role in the country's journey to decarbonisation, the innovative use of the transportation network and technologies for the integration of **renewable gases** (such as, for example, biomethane and hydrogen) were being closely examined. From a perspective of the development of the regulatory system with arrangements that introduce cost/benefit analyses (output based), Snam has developed a cost/benefit analysis methodology, through a process open to the participation of all the stakeholders involved, for new investments in transportation infrastructure, later approved by the Regulator. A monitoring report was also prepared for the Authority on the status of the existing infrastructures in order to consider appropriate incentivisation mechanisms for keeping fully depreciated assets in operation. In 2019, the inclusion of the new gas settlement framework, in force from January 2020, was also completed.
Regarding the services offered, new storage products and new market-based regasification capacity allocation methods for LNG terminals have been introduced aiming at meeting and supporting the ever increasing needs for flexibility for infrastructure users. Lastly, Snam contributed to the total redesign of the settlement arrangements to promote a better allocation of the quantities of energy withdrawn from the network by its customers.

Relations with the ARERA

Description	Transportation	Storage	Regasification
Responses to consultation documents and service proposals (no.)	5	2	2
Tariff proposals (no.)	4	3	2
Data collections (no.)	137	45	24
Investigations (no.) *	0	0	0
Proposed changes to codes and contractual documents (no.) **	6	4	0
Proposal to amend approved contractual documents and codes (no.)	6	4	0

* Information sent to the Authority in the current year with reference to investigations in the sector. Includes fact-finding investigations.
** This also includes proposals still being assessed by the ARERA, including agreements and contracts with operators regarding regulated services.

GAS MARKET MONITORING

Under the scope of its evaluations of the wholesale gas markets, the Authority gave a mandate to the Energy Market Operator, as far as competitive aspects of the gas market are concerned, and to Snam, as the leading transportation business, to support it with monitoring activities through: i) the preparation of an integrated database of transportation and balancing, storage and regasification services, made available to the Regulator and supplied on a daily basis; ii) availability of indices and scheduled reports as part of the balancing function, the balancing of the system and the flexibility of procurement sources; iii) further specific analyses at the request of the Authority. Specifically, in 2019, according to its provisions, 15,600 data flows and periodic reports, as well as analyses conducted in relation to the services (transportation, storage and regasification) were sent over to the Authority in support of the Regulator's activities. Agreements, manuals and dedicated technical specifications to manage these activities are shared with the GME and approved by the Authority.

Developments in Europe

In Europe there is an extensive discussion ongoing on the role of gas in the future energy mix and how the new renewable energy vectors (green gases) can support the energy transition process.
In 2019, the European Commission launched numerous studies and analyses to identify a package of measures, outlined in the European Green Deal in December 2019, aimed at the total decarbonisation by 2050. Specifically, the main expected development for the gas infrastructures involve the possibility of embracing renewable gases and supporting the energy system jointly with the electricity sector (sector coupling).
Snam played an active role in this process making contributions, both through the industry associations it is a member of (e.g. ENTSO-G, Gas Infrastructure Europe and Hydrogen Europe), and directly, through the development of specific evaluations based on the requirements received from the European Commission and European Regulators (CEER/ACER).

THE BALANCING OF THE SYSTEM

In 2019, the integration process through which the commercial management activities of the three businesses - transportation, storage and regasification - merged into a single organisation continued, allowing the optimisation of the processes within Snam.

The creation of a single Commercial Control Room for the management of daily gas deliveries and movements, the balancing of the network (activities that define Snam's responsibilities to the market), the integration of the know-how of the three businesses managed by Snam, has led to an improvement in performance in this area.
In detail, Snam daily receives the nominations of the transportation and storage capacities from its customers. In confirming these requests, the Control Room discharges, among other things, the specific disclosure obligations set out by the Balancing Network Code (EU Regulation 312/2014), such as the hourly publication on the Snam website of the information concerning the balancing status of the system, as well as the publication, twice a day and for every shipper, of information on the withdrawals measured during the gas day. The new commercial Control Room pursues and facilitates the goal of improving the quality of service provided to customers, also reducing management times. In this way, customers which, according to the balancing regime in the Balancing Network Code are responsible for the daily balancing of their positions, receive adequate information to enable the evaluation of their status and potentially undertake actions aimed at correcting their imbalances.

Thanks to the development of the Snam services over the last fifteen years, the Italian gas market has seen a constant growth in the **transportation operators**, from 30 in 2003 to around 210 in 2019, with 150 shippers.
In 2019, 123 connection contracts were signed for the construction of new delivery/redelivery points (of which 26 were for biomethane injection and 61 for the CNG Service Areas) or the upgrading of existing points.

One of the main activities of the **Control Room**, working 24/7 to oversee the Italian gas system, is the balancing of the system which has a dual purpose: physical and commercial.
The **physical balancing** of the system consists of the set of operations through which the Dispatching department of Snam controls flow parameters (capacity and pressure) in real time in order to ensure that gas can move safely and efficiently from the injection points to the withdrawal points all the time.
The **commercial balancing** on the other hand consists of the activities required to correctly schedule, account for and allocate the transported gas, as well as the fee system that encourages users to maintain a balance between the volumes they inject and withdraw from the network.

FLEXIBILITY AND DEFAULT SERVICES

To promote a greater operational flexibility of the Italian gas system, the possibility of booking transportation capacity on a monthly and a daily basis as well as an annual basis was introduced at the redelivery points that supply gas directly to the thermoelectric power plants, only paying for the quantities booked and not the service for the entire thermal year. This type of access allows for a more flexible allocation methods to respond promptly and efficiently to the electrical system's changing operating conditions.

For the thermal year 2019-20 as well, Snam Rete Gas will perform the role of Default Transport Provider with regard to retail companies and end users of its network for which the balancing user responsible for the withdrawals cannot be identified. The same service is also carried out for the sales companies and final customers at third-party transporters who explicitly requested it. In the thermal year 2018-2019, this service involved 112 subjects among end users and retail companies, for volumes of approximately 323,000 MWh.

In 2019, the allocations for storage capacities, like the transportation business, were incorporated in the European PRISMA platform. This synergy helps customer to use the sole platform for booking transportation and storage capacity and makes Snam's storage capacity more transparent at a European level. Thanks to Snam's ongoing commitment to meeting its customers different needs, the flexibility of the services offered, and constant, accurate information is guaranteed through dedicated studies.

INFORMATION SYSTEMS AT THE SERVICE OF CUSTOMERS

The Company offers to its customers an information channel aimed at encouraging prompt and flexible communication, making it possible to obtain smart information according to their requirements, as well as communicating directly and informally through chats. In addition, there is a system of widgets and personalised notifications available for customers through the portal.

Quality supplied (compliance with network codes)

Transportation	**2017**	**2018**	**2019**
Active customers (shippers) (no.)	128	136	**150**
New connection agreements for delivery/redelivery/interconnection points (no.)	78	88	**123**
Contracted transportation capacity/Available transportation capacity (foreign entry/ interconnection points) (%)	71	79	**64**
Compliance with deadlines for issuing connection offers (%)	100	100	**100**
Compliance with deadlines for performing services subject to specific commercial quality standards (%)	100	100	**100**
Interruptions carried out with sufficient advance notice (%)	98	97	**97**
Regasification			
Active customers (shippers) (no.)	4	2	**6**
Compliance with the maximum time to accept proposals for monthly scheduling of deliveries (%)	100	100	**100**
Compliance with maximum interruption/reduction of capacity for maintenance work at the terminal (%)	100	100	**100**
Storage			
Active customers (shippers) (no.)	89	91	**83**
Contractual storage capacity/Available storage capacity (%)	100	100	**100**
Compliance with deadlines for performing services subject to specific commercial quality standards (%)	100	100	**100**
Connection flow lines subject to supervision (%)	100	100	**100**
Total capacity not made available following interruptions/reductions to the service (%)	0	0	**0**

Main online systems at the service of customers

PRISMA Platform*
Manages the contracting and the exchange of transportation capacity at the interconnection points with foreign countries.

SRG Capacity Portal
Manages the transportation capacity contracting process

Capacity Portal
Manages the storage capacity contracting process

* System managed by PRISMA GmbH of which Snam is a shareholder

Gas Logistics
Manages the commercial processes of daily and hourly scheduling, allocation and temporary or final balance sheets

Sampei Portal
Manages the storage agreements in terms of inventory management and gas movements

Servire Portal
Manages the opening/closing request of Redelivering Points, the alternative gas supply service and the shippers' requests for clarification

PSV
It is the system to exchange gas at the Virtual Exchange Point

Billing Portal
Manages the process of issuing the transportation and storage invoices

Myg@sview Portal
"Custom dashboard" for shippers and traders with a set of features for a quick access to transportation and balancing services

From May 22 2019 Snam opened a new digital commercial platform (Jarvis) for its customers aimed at improving commercial activities, developed in conjunction with market operators.
The platform, actively involving customers, aims at updating services and technologies supporting all transportation storage and regasification commercial processes. It proposes to encourage the offering of integrated services for the Italian market enabling possible solutions for the foreign market and it gives its customers the possibility of:

- viewing its active contracts and having access to the documentation;
- accessing the transactions, in detail, for calculating the balancing credit limit;
- independently managing their user profiles.

To facilitate the transition to the new platform, from July 2019, Snam launched a simulator of the new functionalities that will gradually be released available to the market operators.

Specifically, in September 2019, with the release of the Trading PSV system for gas trading activities, the new Jarvis platform came into force, at the same time as the progressive shutting down of the functionalities in the PSV system used previously.
At the end of the year the actions for releasing the designation of supply from storage were finalised; in March 2020, on the other hand, the release of the functionalities for managing the designation of injection in storage is planned. In 2020, a Customer Relationship Management (CRM) will be integrated on the digital platform and the Commercial Excellence Programme (CEP) will be completed, which breaks down into the development of three areas dedicated to the Group's commercial personnel: “know-how”, “behaviour” and “tools”.
The programme is intended to improve and guarantee the Snam's competitive advantage in the long-term, supporting the transition to commercial systems that operate excellently.

MARKET: CUSTOMER ENGAGEMENT ACTIVITIES

Customer care initiatives represent the consolidation of a sustainability journey through which the Company proposes to increase involvement and interaction with customers in order to pursue the constant improvement of the quality of services offered.
The network codes list several indicators for monitoring the quality of service offered by the companies. With regard to these indicators, Snam has maintained its high performance in 2019 as well. One part of these indicators, which refer to specific levels of commercial services quality, leads to the automatic compensation of customers in the event of failure to comply with the service quality standard.

In 2019, 4 commercial workshops and one on biomethane were organised, as well as a seminar dedicated entirely to settlement. The ten-year development plans for the gas transportation network and the cost/benefit analysis methodology were also presented, and two events were held, one with customers at the Panigaglia terminal and one at the headquarter attended by the Snam's CEO.
Workshops are an opportunity for Snam to meet its customers and take an in-depth look at several issues that are important to the market, as well as a chance for discussing innovations and the performance of balancing operations and transportation, storage and regasification activities, and for receiving feedback on the information systems updating process.
Thus, with this in mind, Snam decided to modify the organisation of the events with an initial plenary session and a second session focusing on round table discussions in which its customers could interact and talk about issues related to balancing, settlement, storage allocation and services, transportation and LNG, which have an impact on commercial activities.

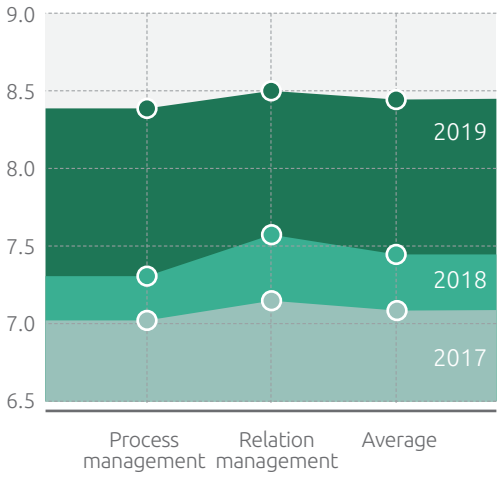
In addition, to meet the demands of the market and allow all the customers to participate, the events were also live streamed.
Customer feedbacks are very important to Snam in order to develop actions aiming at continuous improvement. In effect, the Company monitors customer satisfaction through customer satisfaction surveys and in 2019 it got an average score of 8.4 on a scale from 0 to 10. It also monitors the level of satisfaction of the customer engagement initiatives conducted, which stood at an average value of 9.1 in 2019.

Customer satisfaction thermal year 2018-2019

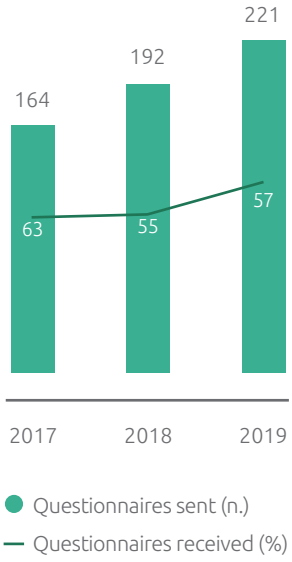
The perceived quality of customers is constantly measured through customer satisfaction surveys.
In December 2019 a new online survey was conducted, involving all shippers and traders with whom Snam collaborated in the thermal year 2018-2019.
The Survey, extended to transportation, storage and regasification activities, involved surveying the customer satisfaction on the quality of services offered, the customer engagement activities undertaken by the Company and on the functionality and additional services introduced in 2019 including in response to the needs of customer that emerged on previous occasions as well as regulatory developments.
The participation rate was 57% and the results were very positive with regard to the customer engagement activities implemented by Snam to improve the services offered and consolidate the collaboration with its stakeholders.

The total average score for the **quality of service** was considerably improved compared to the previous year (7.4) standing at **8.4.**

Results by survey areas (scale from 1 to 10)



Engagement



Governance

Business integrity

Snam operates within the framework of the United Nations' Universal Declaration of Human Rights, the Fundamental Conventions of the ILO - International Labour Organisation - and the OECD Guidelines for Multinational Enterprises and the principles enshrined in the United Nations Global Compact. In this context, Snam carries out its activities fairly and correctly and in compliance with the law, regulations and provisions and recommendations for businesses, committing to maintain and strengthen its Corporate Governance system in line with national and international best practices.

CORPORATE AND ORGANISATIONAL STRUCTURE

The Corporate Governance consists of a set of rules and methods necessary for planning, managing and controlling the operation of the Company, outlined by the Board of Directors, in compliance with the regulations that the Company is subject to as a listed Issuer and in adherence to the Code of Corporate Governance approved by the Corporate Governance Committee.

This Corporate Governance system is based on certain key principles, such as correct and transparent business management implemented through the identification of information flows between corporate bodies and an efficient definition of the internal control and risk management system.
Snam exercises management and coordination activities with regard to its subsidiaries and has adopted specific guidelines on Corporate Governance that define, among other things, the principles, contents, instruments and operating methods of the strategic activities conducted by Snam. In line with the corporate governance system and the features of its organisational structure, the management and coordination activities adequately take into consideration legal autonomy and the principles of correct corporate and business management of subsidiaries.

The organisational structure of Snam features four business units and staff functions, designed with a view to simplifying processes, efficiency and continuous improvement. The business units focus on the activities of (i) international development, (ii) development of the hydrogen business, (iii) development of businesses related to energy transition, (iv) the management of Italian subsidiaries and the development of technical services centred on specialist know-how and expertise for gas sector operators.

BUSINESS ACTIVITIES MANAGEMENT

Business activities are managed in accordance with the organisational and procedural system applied across all Snam Group companies in Italy and abroad, created to ensure that the system of rules governing the business is clear, simple and organic.
In this context, and in line with its business model, Snam adheres to the UN Global Compact, the most important international sustainable development initiative, which aims to promote and disseminate ten global ethical principles concerning human rights, environmental protection, workers' rights and anti-corruption. These principles come from the Universal Declaration of Human Rights, the International Labour Organisation Declaration on the fundamental principles and rights to work, the Rio Declaration on Environment and Development and, lastly, the United Nations Convention against Corruption.
Of fundamental importance for the smooth operation of the organisational system is the allocation of specific objectives to each position of responsibility and on the transparent assessment of results, thereby enabling continual improvements in the effectiveness and efficiency of corporate processes.

The main policies that express Snam's commitment are:

- Sustainable development policy
- Health, safety and environmental protection policy
- Diversity & inclusion policy
- Corporate Governance guideline
- Enterprise Risk Management guideline
- Risk Assurance & Integrated Compliance guideline
- Snam Group Tax Strategy and Tax Cooperative Compliance guideline
- Stakeholder involvement policy
- Human Rights policy
- Policy for the management of philanthropic activities and social initiatives
- Anti-corruption guideline
- Supply chain social policy

THE BOARD OF DIRECTORS

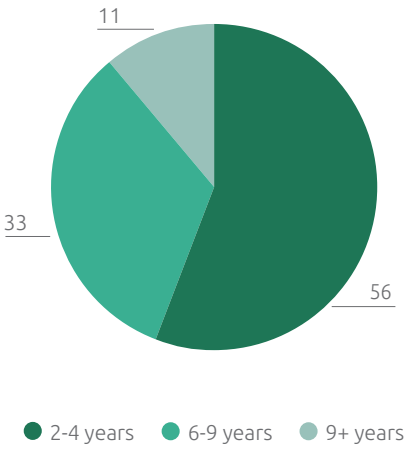
The Board of Directors is the central body of the Snam's corporate governance system and is vested with the broadest powers for the ordinary and extraordinary management of the Company. The Board of Directors currently in office, appointed by the Shareholders' Meeting of April 2 2019, is composed of nine directors who will remain in office for a period of three years. The Board of Directors plays a central role in overseeing the company's commitment to sustainable development along the value chain. It is assisted in these tasks by the Environmental, Social & Governance Committee (ESG) which, from May 2019, replaced and supplemented the Sustainability Committee, in the company since 2016, which makes proposals to and advises the board on ESG issues in business strategies. During the year, the Sustainability Committee met twice and then the ESG Committee met six times with a 100% attendance rate.

Changes compared with the previous term

	Previous term	Current term	Average FTSE MIB
Number of Directors	9	9	12.6**
Directors elected from minorities	3 (33.3%)	3 (33.3%)	2.5 (17%)**
Gender less represented in the Bod	44.4%	33.3%	36.9% *
Independent Directors	56%	66.6%	54.6%**
Average age of Directors	56	54	57**
President Status	Non executive	Non executive	Non executive 74%**
Lead Indipendent Director Existence	no	no	24.3% *

* Corporate Governance Committee - 2019 Report on the development of corporate governance of listed companies, 7th report on the application of the Code of Corporate Governance.
** Assonime - ***Corporate Governance in Italy***: corporate governance, ***remuneration and comply-or-explain*** (2019), ***Notes and Studies*** 2/20. The 2019 survey includes 220 Italian companies, listed as at 31 December 2018, for which Reports were available at 15 July 2019.

Seniority of office of the Directors on the BoD (%)



Board of Directors members by age range

	2017	2018	2019
Members of the Board of Directors < 30 years	0	0	0
Members of the Board of Directors between 30 and 49 years	2	2	2
Members of the Board of Directors > 50 years	7	7	7

GENDER EQUALITY IN CORPORATE BODIES

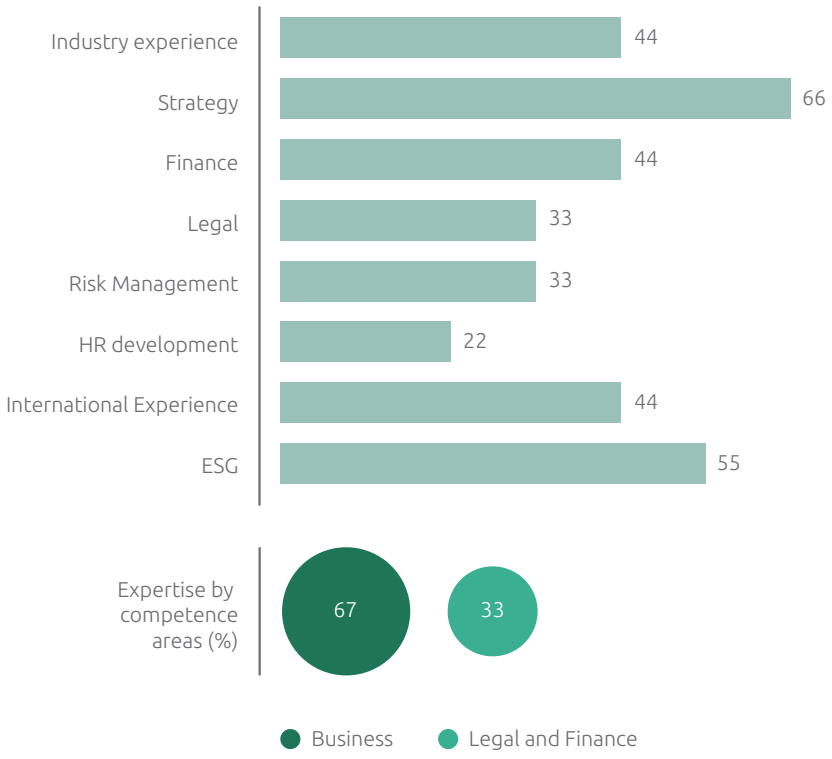
Gender equality, like other social and governance factors, is a vital element in the creation of value for Snam.
On October 23 2019, the Extraordinary Shareholders' Meeting almost unanimously approved (with a vote in favour of more than 99%) the amendments to Articles 13 and 20 of the by-laws in order to keep the provisions on the issue of gender equality in the Company's boards and governing bodies in force, as well as in consideration of the disappearance of the effects of the Golfo-Mosca Law. In this way, Snam voluntarily incorporates, at a statutory level, the criterion of **gender equality**, so that at least one third of the Board of Directors and the Board of Statutory Auditors are made up of the less represented gender. This decision is in line with national and international best practices on the issue of gender equality and with Snam's commitment to safeguard diversity and ensure equal opportunities for all its employees.

Snam's Board of Directors is:

- **independent**, with 5 directors out of 9 who are classified as independent pursuant to the TUF and Code of Corporate Governance and a Chairman classified as independent pursuant to the TUF:
- **representative**, with one third of the directors elected from the lists submitted by the minority shareholders;
- **inclusive:** 33% of directors are female.

The detailed information related to the Corporate Governance system is reported in the "Corporate Governance report", published on the website (https://www.snam.it/export/sites/snam-rp/repository/ENG_file/Governance/Social_bodies/Shareholders_meeting/Minutes_documents/2019/Report_on_Corporate_Governance_and_Ownership_Structure_2019.pdf).

Directors' expertise (%)



The fight against corruption and illegality

Ethical principles and business values

In its day by day operations, Snam works with:

- transparency, honesty, fairness, good faith in full compliance with competition protection rules;
- involvement of stakeholders, including dialogue on sustainability and corporate social responsibility;
- creating competitive value for the company, its stakeholders and the territories in which it operates;
- protecting and promoting human rights;
- protecting all forms of individual freedom and repudiating any type of discrimination, violence, corruption (in any form thereof with reference to any public or private persons), and forced or child labour;
- recognising and safeguarding the dignity, freedom and equality of human beings;
- protecting jobs and trade-union freedom, health, safety, the environment and biodiversity.

The main internal regulatory reference for the fight against corruption is the Anti-corruption guideline that applies to Snam and its subsidiaries and is also brought to the attention of the other investee companies in order to promote principles and behaviours consistent with those expressed by the parent company. The guideline takes its inspiration from the principles of ethics, transparency, integrity and expertise already referred to in the Code of Ethics and also strives for the continuous improvement of the awareness of Snam's people to recognise corruption and any other type of fraud, as well as their responsiveness to play an active role in the prevention, suppression or reporting of possible violations of anti-corruption laws. The **Anti-corruption guideline** is consistent with the tenth principle of the Global Compact, which rejects corruption "in all forms, including extortion and bribes" and clearly outlines permitted and prohibited conduct. In particular:

- it is prohibited to offer, promise, give, pay, authorise anyone to give or pay, directly or indirectly, an economic or material benefit to a public or private official (active corruption);
- it is prohibited to accept a request from, or solicitation from, or authorise anyone to accept or solicit, directly or indirectly, an economic or material benefit from anyone (passive corruption);
- it pays particular attention to the selection and qualification of suppliers, the awarding of contracts, the management of contracts, the standard terms of protection, including those of commitment to respect Anti-Corruption Laws and to verify the ethical requirements of suppliers;
- it establishes that all of Snam's relations with, which refer to, or which involve third-parties shall be conducted in full compliance to the provisions of the Anti-corruption guideline and the instrument therein.

The Anti-corruption guideline is part and parcel of a broader business ethics control system adopted by Snam that aims to ensure the company's compliance with national and international laws and best standards. In this regard, Snam provides specific training to make personnel aware and it carries out monitoring in order to check the level of dissemination and knowledge.
To prevent the risk of corruption and fraud in general in the supply chain, all suppliers and subcontractors are required to sign the Ethics and Integrity Agreement that allows to carry out reputational analysis aimed at identifying - based on public information - the possible risks of infiltration by organised crime.

In 2019, Snam worked with different bodies and organisations, including:

- the OECD taking part:
  - in the OECD *Gobal Anti-Corruption and Integrity Forum*, an event that took place in March on "Tech for Trust: risks and opportunities of new technologies for anti-corruption & integrity", during which Snam was invited to a select session on State Owned Enterprise, organised by some of the representatives of the OECD Directorate of the *Corporate Governance & Corporate Finance Division*, and aimed at gathering together some of the Compliance & Anti-corruption Offices of some of the biggest experts in the field;

- the *Trust in Business Forum* in October, where Snam was invited to two days totally dedicated to taking an in-depth look at the role of trust in business, with a panel dedicated to issues such as: "Strategies to strengthen trust: performance measurement, audit quality, trust beyond compliance", "Levelling the playing field: role of regulators, policy makers and the Board in building trust in business" and "Developing solutions";
- to the *Working Party on State Ownership and Privatisation Practices*, dedicated to the analysis of the methods for the correct implementation of the guidelines published in May;
- to the annual consultation of the *OECD Working Group on Bribery* in December 2019, during which several observations were made and implemented on what was circulated several weeks earlier by BIAC (Business at OECD) and the subject of consultation. In addition, in October, BIAC appointed Snam's General Counsel as the Vice-Chair of the Anti-corruption Committee, an extremely important recognition for Snam as it is the only Italian company in the leadership of the permanent members of the business at the OECD.

- Transparency International Italy, taking part:
  - in the *Business Integrity Forum*, which took place in June, at the Scuola Superiore Sant'Anna di Pisa, during which Snam participated to two round table discussions on: "Training and cultural input to create a corporate climate aimed at strengthening the values and culture of lawfulness" and "Transparency of beneficial ownership" and, also, Snam's General Counsel, following the speech by the Minister of Justice, gave a speech on "Ethics and integrity in the private sector";
  - in the session "Synergies between public and private: vices and virtues", as part of the 4th edition of the *Business Integrity Forum National Event of Transparency International Italy and the annual presentation of the Business Index on Transparency*.

- the Ministry of Foreign Affairs and International Cooperation took part:
  - in the presentation of the 2nd Report on Italy of the United Nations Convention against Corruption that took place in May;
  - in the 9th Italy- Latin America Conference in October, where Snam's General Counsel took part in a panel on "Public tenders in Italy: Transparency and Integrity";
  - in the 8th Conference of the Member States of the United Nations Convention against Corruption in Abu Dhabi in December, during which Snam participated in the *Italian Business Integrity Day* reporting on the best practices implemented to manage the complexity related to the issues of compliance and anti-corruption. In addition, in this context Snam was also invited to take part in a round table discussion organised by the *United Nations Office on Drugs and Crime* called "Private sector as a Partner in Anti-Corruption Education", an opportunity for Snam to internationally demonstrate its experience and commitment to training as well, which it conducts not only for its own personnel, but also externally.
- In the *World Economic Forum*, as part of the *Partnering Against Corruption Initiative* (PACI) of the *World Economic Forum* in October, and taking part, in the same month, at the half-yearly meeting, where it could make comparisons on specific issues of interest at a round table discussion where leading Compliance & Anti-corruption Officers from some of the most important companies in the world took part.
- *Business 20* (or B20), under the Japanese Chairmanship of the B20 for 2018/2019, as the only Italian company mentioned in the document presented in May 2019 at the Tokyo Summit in relation to the SDG16 (*Peace, justice and strong institutions*) as a "Tangible Example" of a company that demonstrates a firm commitment to the fight against corruption. In addition, as confirmation of this recognition, in November it was included among the permanent members of the "Integrity & Compliance Taskforce" under the Saudi Chairmanship of B20, whose work will begin in January 2020 with an inception event and continue for the entire year, until the summit in October, where the results of the work will be presented with the proposals to take to the G20.

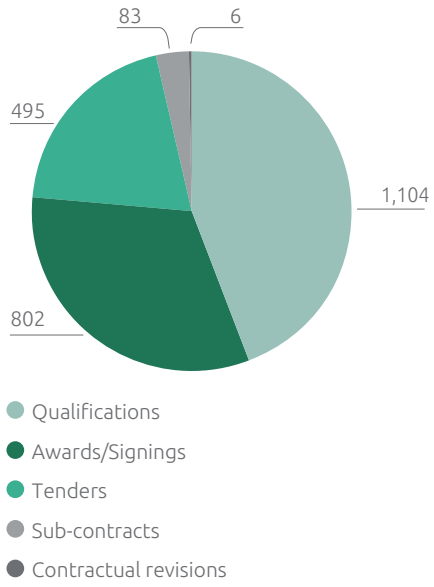
The Company illustrated its tools to safeguard transparency and in the fight against corruption which also includes **training meetings for new hires** on business ethics, lawfulness and anti-corruption during which, in 2019, around 321 hours of training was delivered.
Snam also removed all manual compliance procedures and improved the traceability, transparency and security of all its operations, digitalising the data information flow to the National Anti-corruption Authority through a direct interface between the respective information systems and the allocation of a tender identification code (CIG).

REPUTATIONAL CHECKS

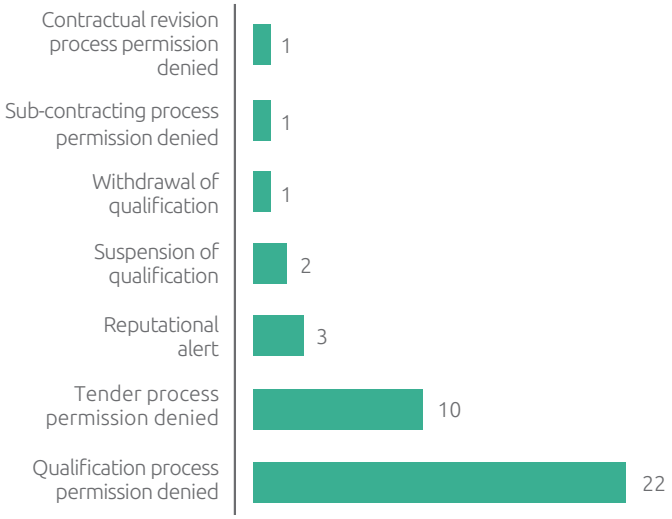
In 2019, 5,348 reputational checks were carried out on counterparties, of which 2,490 involved suppliers, subcontractors and participants in tenders, that break down as illustrated in the graph below.
Following the checks conducted and the investigation by the Technical Secretariat, the Evaluation Team, after finding unlawful behaviour, arranged 40 provisions.

Reputational checks on suppliers, subcontractors and participants in tenders:

Breakdown by type (no.)



Measures (no.)



Management systems

The main objective of the management systems is to promote constant improvement in corporate performance relating to environment, health and safety and the quality of services provided and to guarantee regulatory compliance through the introduction and implementation of specific policies, organisational systems and programmes.
In 2019, Snam implemented all the necessary activities to extend the certification of the management systems to the new companies that entered the scope of consolidation and to maintain and update other existing certifications.
To check the effectiveness of the management systems, in 2019 227 audits were carried out at various group companies (92 of them by an external team) and 38 audits at contractors working at sites, on health, safety and environment issues. The latter and the internal audits were partly carried out by the Snam internal team, composed of 47 auditors.

Types of audit (no.)

	2017	2018	2019
Internal	127	142	**135**
External	36	95	**92**
Total	163	237	**227**

Management systems

Company	Certification scope	Type of certification and accreditation	Year of first certification
Snam	Management of the operational continuity for the design, development and centralised management of process and remote control systems for the dispatch of natural gas transportation.	ISO 22301	2018
	Processes for the transportation of natural gas through pipelines, auxiliary systems and compression systems (Administration, Business Development, Marketing of services, Realisation of assets, Asset Management, HSEQ, Planning and control, Supply chain) and for storage in natural gas geological units (Marketing of services).	ISO 9001	2016
	Company	ISO 14001	2015
	Management of the security of information for the design, development and centralised management of process and remote control systems for the dispatch of natural gas transportation.	ISO 27001	2014
	Company	BS OHSAS 18001	2012
Snam Rete gas	Company	ISO 9001	2016
	Natural gas dispatch and transportation activities	ISO 22301	2015
	Company	ISO 14001	2013
	Company	BS OHSAS 18001	2010
	Testing laboratory (LAB 764 Piped gaseous flows)	ISO 17025	2007
	Calibration laboratory (LAT 155 Natural gas mixtures)	ISO 17025	2002
GNL Italia	Company	BS OHSAS 18001	2012
		ISO 14001	2000
Stogit	Company	BS OHSAS 18001	2012
	Design and delivery of natural gas metering and accounting	ISO 9001	2008
	Company	ISO 14001	2002
ITG	Company	ISO 9001	2018
		ISO 14001	2010
		BS OHSAS 18001	2009
Snam 4 Mobility	Company	BS OHSAS 18001	2018
		ISO 9001	2018
		ISO 14001	2018
TEP	Company	UNI 11352:2014	2013
	Company	ISO 9001	2010
Cubogas	Company	BS OHSAS 18001	2018
		ISO 9001	2018
		ISO 14001	2018
IES Biogas	Company	ISO 9001	2018
		SOA OS 22 CL VII	2019
TEA Servizi	Company	UNI 11352:2014	2019
		ISO 9001	2014
		ISO 14001	2014

Annex

Data and Performance Indicators

Key operating figures

	2017	2018	2019
Natural gas transportation			
Gas injected into the network (10^9 m^3)	74.59	72.82	**75.37**
Gas pipeline network (km)	32,584	32,625	**32,727**
Average travel distance of gas in Italian transportation network (km)	551	510	**607**
Gas compression stations (no.)	11	13	**13**
Installed power in the gas compression stations (MW)	902	961	**961**
Liquefied natural gas regasification			
Regasified natural gas (10^9 m^3)	0.63	0.91	**2.40**
Number of LNG tanker loads	15	21	**57**
Natural gas storage			
Gas injected in storage (10^9 m^3)	9.80	10.64	**10.16**
Gas delivered from storage (10^9 m^3)	10.12	10.43	**9.17**
Operating concessions (no.)	9	9	**9**

Key financial figures (*)

	2017	2018	2019
Economic and financial data (millions of €)			
Total revenue	2,533	2,586	**2,665**
Total revenue - net pass through items	2,441	2,528	**2,604**
Adjusted EBIT	1,363	1,405	**1,417**
Adjusted net profit	940	1,010	**1,093**
Operating costs	511	491	**496**
Total revenue - net pass through items	419	433	**435**
EBITDA	2,022	2,095	**2,169**
Net invested capital at December 31	17,738	17,533	**18,181**
Shareholders' equity at December 31	6,188	5,985	**6,255**
Net financial debt at December 31	11,550	11,548	**11,923**
Free Cash Flow	423	1,161	**482**
Added value produced	2,447	2,532	**2,695**
Added value distributed	1,619	1,634	**1,639**
Snam's stock			
Number of shares in share capital (mln)	3,501	3,469	**3,395**
Number of shares outstanding on 31 December (mln)	3,415	3,301	**3,292**
Average number of shares outstanding during the year (mln)	3,422	3,358	**3,301**
Year-end official share price (€)	4.086	3.820	**4.686**
Average official share price during the period (€)	4.043	3.747	**4.474**
Market capitalisation (millions of €)	13,953	12,606	**15,428**
Dividends paid in the period (millions of €)	718	731	**746**

(*) For additional information please refer to the Snam 2019 Annual Report

Key employees figures and indicators

	2017	2018	2019
Total employees (no.)	2,919	3,016	**3,025**
Of which women (no.)	393	419	**441**
Average headcount (no.)	2,927	2,943	**3,015**
Average age of employees (years)	45.7	44.9	**44.4**
Average length of service (years)	21.0	19.5	**18.6**
Employees by business segment			
Corporate (no.)	824	978	**954**
Transportation (no.)	1,972	1,915	**1,945**
Storage (no.)	60	59	**61**
Regasification (no.)	63	64	**65**
Employees by grade			
Executives (no.)	93	107	**111**
Middle Managers (no.)	456	480	**493**
Administrative staff (no.)	1,655	1,682	**1,683**
Blue-collar workers (no.)	715	747	**738**
Employees by type of contract			
Permanent contract (no.)	2,755	2,812	**2,817**
Of which women (no.)	369	395	**417**
Apprenticeship or internship contract (no.)	150	185	**193**
Fixed-term contract (no.)	14	19	**15**
Full time contract (no.)	2,877	2,975	**2,987**
Of which women (no.)	357	382	**407**
Part-time contract (no.)	42	41	**38**
Of which women (no.)	36	37	**34**
Employees by geographical area			
North (no.)	2,204	2,302	**2,294**
Central (no.)	202	220	**241**
South and Sicily (no.)	504	490	**477**
Abroad (no.)	4	4	**13**
Employees by gender			
Men (no.)	2,526	2,597	**2,584**
Women (no.)	393	419	**441**
Remuneration differential - women/men (executive grade)	1.03	0.98	**1.0**
Remuneration differential - women/men (middle manager grade)	0.96	0.93	**0.95**
Remuneration differential - women/men (administrative staff grade)	0.89	0.89	**0.90**

(follows)

	2017	2018	2019
Entries and Departures			
Hired from the market (no.)	148	195	**172**
of which university graduates (no.)	100	108	**92**
of which high school graduates (no.)	48	86	**79**
of which women (no.)	53	42	**38**
of which men (no.)	95	153	**134**
Hiring rate (%) (*)	5.1	6.5	**5.7**
Hiring rate < 30 years old (%) (**)	13.3	22.8	**20.1**
Hiring rate between 30 and 49 years old (%) (**)	8.4	6.9	**5.2**
Hiring rate > 50 years old (%) (**)	0.2	0.5	**0.6**
Other new employees (non-consolidated companies, acquisitions, etc.)	36	126	**59**
Percentage of university graduates hired (%)	67	55	**53**
Departures in the year (no.)	69	189	**198**
Other Departures (non-consolidated entities etc.)	79	35	**24**
Departure rate (%)	2.4	6.3	**6.6**
Voluntary Departure rate (%)	1	1.2	**1.5**
Turnover (%)	7.4	13.0	**12.3**
Absenteeism rate (no.)	4.7	4.6	**4.5**
Training			
Training hours (no.)	85,346	107,711	**114,179**
Participants (no.)	8,604	13,999	**26,518**
Average hours of training per employee (no.)	29.2	35.7	**37.7**
Executive training hours (no.)	1,908	4,392	**5,669**
Middle Manager training hours (no.)	8,600	19,072	**16,950**
Administrative staff training hours (no.)	39,316	49,650	**58,238**
Blue-collar worker training hours (no.)	35,522	34,657	**33,322**
Average training hours delivered to men (no.)	31.3	36.9	**38.4**
Average training hours delivered to women (no.)	15.8	28.7	**33.8**
Average training hours delivered to executives (no.)	20.5	41.0	**51.1**
Average training hours delivered to middle managers (no.)	18.9	39.7	**34.4**
Average training hours delivered to administrative staff (no.)	23.8	29.5	**34.6**
Average training hours delivered to blue-collar workers (no.)	49.7	46.4	**45.2**
Training hours for health, safety and environment (no.)	9,641	28,345	**28,123**
Participation for health, safety and environment (no.)	1,695	4,953	**4,567**

33 people were employed on staff leasing contracts in 2018 (33 in 2017 and 36 in 2016).

(*) Hiring rate = (market hires/average workforce *100)

(**) Hiring rate by age = (market hires by age range/total employees by age range at 31/12 *100)

Main HSE data and indicators

	2017	2018	2019
Health and Safety			
Employee accidents (no.)	6	4	**2**
Employee accident frequency index	1.24	0.84	**0.41**
Employee accident severity index	0.05	0.02	**0.03**
Contractor accidents (no.)	5	3	**5**
Contractor accident frequency index	0.54	0.41	**0.71**
Contractor accident severity index	0.83	0.03	**0.07**
Employee and contractor accident frequency index	0.78	0.58	**0.59**
Employee and contractor severity index	0.56	0.02	**0.05**
Energy			
Total energy consumption (TJ)	12,582	13,281	**12.152**
of which natural gas (TJ)	12153.2	12,801.4	**11,627.9**
of which diesel (TJ)	77.9	91.0	**82.6**
of which gasoline (TJ)	2.3	2.8	**3.9**
of which LPG (TJ)	0.4	0.4	**0.4**
of which heat (TJ)	10.8	8.5	**14.8**
of which electricity (TJ)	337.7	376.9	**422.6**
Emissions			
Natural gas emissions (10^6 m^3)	46.8	44.4	**39.2**
GHG Scope 1-2-3 Emissions (10^3 t CO_{2eq})	1,746	1,967	**1,917**
GHG Scope 1 Emissions (10^3 t CO_{2eq})	1,500	1,497	**1,347**
GHG Scope 2 Emissions (10^3 t CO_{2eq}) - Market based	29	32	**32**
GHG Scope 3 Emissions (10^3 t CO_{2eq})	217	438	**538**
NOx emissions (t)	532	564	**452**
CO emissions (t)	329	196	**181**
CO_2 emissions /energy used (kg/GJ)	54.9	54.7	**54.0**
NOx emissions/energy used (kg/ GJ)	0.042	0.042	**0.037**

(follows)

	2017	2018	2019
Waste			
Total waste production (t)	54,413	28,286	**27,823**
Non-hazardous waste production (t)	50,604	24,187	**22,154**
Hazardous waste production (t)	3,809	4,099	**5,669**
Waste recovered from production operations (%)	80	60	**42**
Water extraction and discharge			
Freshwater extractions (10^3 m^3)	170	134	**228**
Fresh water discharges (10^3 m^3)	112	68	**181**
Seawater extractions (10^3 m^3)	4,000	4,000	**6,048**
Seawater discharges (10^3 m^3)	4,000	4,000	**6,048**
HSE management			
Environmental expenses (millions of €)	120.6	100.3	**114.4**
Safety and health expenses (millions of €)	34.7	31.6	**33.7**
Medical visits (no.)	1,914	1,350	**1,984**
Periodical medical visits	1,688	1,061	**1,747**
Diagnostic examinations (no.)	3,508	2,020	**3,261**
Total HSEQ audits conducted (no.)	159	237	**227**
Environmental surveys (no.)	279	278	**243**

Main HSE Data and Indicators – Business Segments

	2017	2018	2019
Natural gas transportation			
Health and safety			
Employee accidents (no.)	2	4	**0**
Contractor accidents (no.)	4	3	**5**
Employee frequency index	0.66	1.29	**0**
Employee severity index	0.03	0.03	**0**
Contractor frequency index	0.47	0.46	**0.83**
Contractor severity index	0.90	0.03	**0.08**
Energy and the Environment			
Energy consumption (TJ)	7,459	7,463	**6,123**
GHG Scope 1 Emissions (10^3 t CO_{2eq})	1,008	982	**838**
Natural gas emissions (10^6 m^3)	34.4	32.8	**28.7**
Natural gas recovered (10^6 m^3)	4.1	8.2	**9.4**
NOx emissions (t)	342	305	**286**
Energy consumption/compressed energy (%)	0.25	0.25	**0.26**
CO_2 emissions/compressed gas (kg/10^6m^3)	5,767	5,644	**5,874**
Natural gas emissions/km of network (m^3/km)	1,057	1,007	**876**
NOx emissions/compressed gas (kg/10^6m^3)	4.8	4.2	**5.0**
Average emissions of NOx per turbine/installed capacity ([mg/Nm^3]/MW)	4.4	3.8	**3.8**
DLE turbine operating hours/Total turbine operating hours (%)	93	97	**95**
Liquefied natural gas regasification			
Health and safety			
Employee accidents (no.)	1	0	**0**
Contractor accidents (no.)	0	0	**0**
Employee frequency index	9.31	0	**0**
Employee severity index	0.17	0	**0**
Contractor frequency index	0	0	**0**
Contractor severity index	0	0	**0**

(follows)

	2017	2018	2019
Energy and the Environment			
Energy consumption (TJ)	325	462	**1,217**
GHG Scope 1 Emissions (10^3 t CO_{2eq})	44	41	**83.5**
Natural gas emissions (10^6 m^3)	1.7	1.2	**1.3**
NOx emissions (t)	14.8	22.4	**49.8**
Natural gas storage			
Health and safety			
Employee accidents (no.)	2	0	**0**
Contractor accidents (no.)	0	0	**0**
Employee frequency index	6.71	0	**0**
Employee severity index	0.43	0	**0**
Contractor frequency index	0	0	**0**
Contractor severity index	0	0	**0**
Energy and the Environment			
Energy consumption (TJ)	4,787	5,337	**4,784**
GHG Scope 1 Emissions (10^3 t CO_{2eq})	448	473	**424**
Natural gas emissions (10^6 m^3)	10.7	10.5	**9.2**
NOx emissions (t)	175	236	**116**
Emissions of natural gas for storage/gas stored (%)	0.048	0.041	**0.033**
NOx emissions/stored gas (kg/10^6 m^3)	17.9	22.2	**11.4**
Average emissions of NOx per turbine/installed capacity ([mg/Nm^3]/MW)	5.2	5.2	**3.7**

Methodology note

INTRODUCTION AND PRESENTATION OF THE DOCUMENT

The Sustainability Report is an annual document that Snam has been publishing voluntarily since 2006. Through this document the Company wishes to inform a wide, diversified audience of stakeholders (citizens, institutions, local communities, the media, shareholders, lenders, employees, suppliers, customers, authorities, etc.) of the decisions, activities, results and use of resources as part of ESG (Environment, Social and Governance). The Report was prepared in conformity with GRI Standards, comprehensive option, with the goal of providing a flexible tool in communicating the results quickly, providing a concrete and quantitative measure of the information made available. In addition, this document also constitutes the Communication On Progress for the Global Compact of the United Nations.

Non-financial data and information are also reported in other documents published by the Company, which examine certain aspects in more detail. Specifically:

- The **Directors' Report**, included in the Annual Report drafted following the instructions of the International Integrated Reporting Council;
- The **Non-Financial Statement**, included in the Directors' Report as a specific chapter, which deals specifically with the environmental aspects of health and safety, personnel management, anti-corruption and the protection of human rights, in conformity with the requirements of Italian Legislative Decree 254/2016;
- The **Report on Corporate Governance and Ownership Structures**, that describes the governance of the Company in detail, including aspects relating to sustainability such as, for example, the composition of the ESG Committee;
- The **Remuneration Report,** that describes the remuneration policies adopted and how they are integrated with the Group's sustainability goals;
- The document **"Changes today for the climate of tomorrow"** prepared in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) that describes Snam's activities with regard to climate change.

CONSOLIDATION SCOPE AND CRITERIA

The scope of reference of the information in the Sustainability Report coincides with the scope of consolidation of the Consolidated financial statements and includes:

- **Corporate and other activities** (Snam S.p.A. with the subsidiaries Gasrule Insurance Limited, Snam International BV, Snam Gas & Energy Service-Beijing);
- **Transportation** (Snam Rete Gas S.p.A., Asset Company 2 S.r.l., Infrastrutture Trasporto Gas S.p.A., Enura S.p.A.);
- **Liquefied Natural Gas regasification** (GNL Italia S.p.A.);
- **Storage** (Stogit S.p.A.);
- **Sustainable mobility and Biomethane** (Snam4Mobility S.p.A., Cubogas S.r.l., IES Biogas S.r.l., Enersi Sicilia S.r.l., Snam4Environment S.r.l. and Gruppo Renerwaste);
- **Energy efficiency** (Asset Company 4 S.r.l., TEP Energy Solution S.r.l. and TEA Servizi S.r.l.).

The data in the paragraph "The procurement numbers" include the following Group Companies: Snam S.p.A., Snam Rete Gas S.p.A., GNL Italia S.p.A., Stogit S.p.A. and Snam 4 Mobility S.p.A..

Regarding the environmental aspects reported, the companies Snam International BV, Gasrule Insurance DAC, Enura SpA, Snam4Environment Srl, Renerwaste Group (acquired at the end of 2019) and Snam Gas & Energy Service-Beijing are excluded from the consolidation. These companies have no significant environmental impact and weigh on the total workforce of the Group by less than 2%. Regarding health and safety aspects, the company Snam Gas & Energy Service-Beijing is excluded from the consolidation, as it also has low relevance on this aspect

REPORTING PROCESS AND METHODS

The process of gathering data and information and preparing the report was coordinated and managed by the Sustainability unit of the parent company, Snam, in cooperation with the various corporate functions and operating companies. The publication of the document, at the same time as the Annual Report, takes place after the approval of the Snam Board of Directors on 18 March 2020. The economic and financial, operating and governance data was taken directly from the Annual Report and from the Report on Corporate Governance and Ownership Structure. Data concerning the environment, employees and the other aspects addressed in the document were gathered from the process owners.
The calculation methods used for determining the indicators are given in the specific reference paragraphs. To ensure the comparability over time of the indicators deemed most significant and to give the reader the chance to compare the performance achieved, current values have been placed alongside those for the previous two years, using graphs and tables. We have tried within this document to place equal emphasis on positive and negative aspects, providing, where deemed appropriate, a comment on the results achieved, including the facts and events that the Company was involved with in 2019.

APPLICATION OF THE GRI STANDARDS

The content of the report refers to Snam's material issues and the related material GRI topics. The main methods for applying the standards are listed below: standard 102 is entirely covered (from point 102-1 to point 102-56) and the topic specific standards of series 200 (Economic), 300 (Environmental) and 400 (Social) have been selected in relation to the issues reported in the materiality matrix. As regards standard 103 (Management approach), we proceeded as follows:

- For item 103-1 (defining the internal and external scope for each material topic), the following table was compiled;
- for items 103-2 (approach to management), and 103-3 (evaluation of approach to management) the disclosure was made for sub-groups of material GRI topics and for each of Snam's material topics which could not be related to a specific standard topic.

Representation of the material topics boundaries (103-1)

Material issues	GRI aspects	Scope of the aspect		Reporting restrictions	
		Internal	External	Internal	External
Climate change	GRI 305 Emissions	T, S, R, M, B, E	Suppliers	-	Emissions related to energy consumption of suppliers
	GRI 302 Energy	T, S, R, M, B, E	Suppliers	-	Energy consumption of suppliers
Health and safety	GRI 403 Occupational Health & Safety	One Company	Suppliers	-	-
Protecting the local area and biodiversity	GRI 304 Biodiversity	T, B	Suppliers	-	-
Green business	-	One Company	-	-	-
Economic performance	GRI 201 Economic Performance	One Company	-	-	-
Reliability of infrastructures and business continuity	-	One Company	-	-	-
Brand reputation	-	One Company	-	-	-
Innovation	-	One Company	-	-	-
Relations with local communities	GRI 413 Local communities	One Company	-	-	-
	GRI 203 Indirect economic impact	One Company	-	-	-
Combating corruption	GRI 205 Anti-corruption	One Company	Suppliers	-	-
Business integrity	GRI 205 Anti-corruption	One Company	Suppliers	-	-
	GRI 419 Socio-economic compliance	One Company	-	-	-
Developing and safeguarding human capital	GRI 401 Employment	One Company	-	-	-
	GRI 404 Training and Education	One Company	-	-	-
Diversity and inclusion	GRI 405 Diversity and Equal opportunities	One Company	-	-	-
	GRI 406 Non-discrimination	One Company	-	-	-

Key: T = Transportation; S= Storage; R= Regasification; C= Corporate; M = Sustainable mobility; B = Biomethane; E = Energy efficiency; One Company= T, S, R, C, M, B, E

ASSURANCE

The report was audited by the independent auditors (PWC S.p.A.) in accordance with the principles and indications of the International Standard on Assurance Engagement ISAE 3000 (Revised) issued by the International Auditing and Assurance Standards Board (IAASB). The results of the audits conducted are given in the Independent Auditors' Report attached.

Material issues	Description
Reference period	Year from 1-1-2019 to 31-12-2019
Frequency	Annual
Latest document published	Energy of Change The business facing the challenges of the climate and financial sustainability - 2018 Sustainability Report
Contact persons	Domenico Negrini, Bruno Andreetto Snam S.p.A. Piazza Santa Barbara, 7 San Donato Milanese (MI) - Italy
Accessibility	www.snam.it
Email	domenico.negrini@snam.it – bruno.andreetto@snam.it

GRI Content Index

SR = Sustainability Report
RF = Integrated Financial Report – Annual Report
DNF = Consolidated Non-Financial Statement
RCG = Corporate Governance and Ownership Structure Report
RR = Remuneration Report
TCFD = Task Force on Climate-related Financial Disclosure - 2019

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
GRI 102 General disclosure 2016				
Organizational Profile	102-1	Name of the organization	SR "Cover page"	
	102-2	Activities, brands, products, and services	SR "Snam's profile"	
	102-3	Location of headquarters		Snam HQ is located in San Donato Milanese www.snam.it/en/about-us/headquarter/index.html
	102-4	Location of operations	SR "Snam's profile"	
	102-5	Ownership and legal form	SR "Snam's profile"	-
	102-6	Markets served	SR "Snam's profile"	-
	102-7	Scale of the organization	SR "Snam's profile" SR "Performance figures and indicators"	
	102-8	Information on employees and other workers	SR "People" SR "Performance figures and indicators"	The breakdown by gender and region of the number of employees by type of contract is not significant
	102-9	Supply chain	SR "The supply chain"	
	102-10	Significant changes to the organization and its supply chain	SR "The supply chain"	
	102-11	Precautionary Principle or approach	SR "Protecting the climate and the air " SR "The fight against corruption and illegality" RF "The Internal Control and Risk Management System" RF "The Enterprise Risk Management process (ERM)" TCFD "Risks and opportunities related to climate change"	
	102-12	External initiatives		Snam adheres to the Global Compact and to the Task Force on Climate Related Financial Disclosure (TCFD)
	102-13	Membership of associations		Section "Snam and associations" published on the web page www.snam.it/en/Sustainability/responsibility_towards_everyone/innovation_and_technology.html

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
GRI 102 General disclosure 2016				
Strategy	102-14	Statement from senior decision-maker	SR "Letter to stakeholders"	
	102-15	Key impacts, risks, and opportunities	SR "The pursue of a new energy" RF "The Enterprise Risk Management process (ERM)" TCFD "Risks and opportunities related to climate change"	-
Ethics and integrity	102-16	Values, principles, standards, and norms of behavior	SR "Business integrity" SR "The fight to corruption and illegality"	
	102-17	Mechanisms for advice and concerns about ethics		http://www.snam.it/en/governance-conduct/business-conduct/whistleblowing/index.html
Governance	102-18	Governance structure	SR "Business integrity" RF "Governance e organization" TCFD "The roles and responsibilities for the climate change management"	
	102-19	Delegating authority	SR "Business integrity" RF "The Internal Control and Risk Management System" RF "The Enterprise Risk Management process (ERM)"	
	102-20	Executive-level responsibility for economic, environmental, and social topics	SR "Business integrity" RCG "Snam's Board of Directors"	
	102-21	Consulting stakeholders on economic, environmental, and social topics	SR "Stakeholder relationships"	
	102-22	Composition of the highest governance body and its committees	SR "Business integrity" RCG "Snam's Board of Directors"	
	102-23	Chair of the highest governance body	SR "Business integrity" RCG "Snam's Board of Directors""	
	102-24	Nominating and selecting the highest governance body	SR "Business integrity" RCG "Snam's Board of Directors"	
	102-25	Conflicts of interest	RCG "Shareholders 'Agreements"	
	102-26	Role of highest governance body in setting purpose, values, and strategy	SR "Business integrity" RCG "Snam's Board of Directors"	
	102-27	Collective knowledge of highest governance body	RCG "Induction programme for Directors and Statutory Auditors" TCFD "The roles and responsibilities for the climate change management"	
	102-28	Evaluating the highest governance body's performance	SR "Business integrity" RCG "Snam's Board of Directors"	

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
GRI 102 General disclosure 2016				
Governance (follows)	102-29	Identifying and managing economic, environmental, and social impacts	SR "Business integrity"	
	102-30	Effectiveness of risk management processes	RF "The Internal Control and Risk Management System" TCFD "Risks and opportunities related to climate change"	
	102-31	Review of economic, environmental, and social topics	SR "Business integrity"	
	102-32	Highest governance body's role in sustainability reporting	SR "Methodological note"	
	102-33	Communicating critical concerns		http://www.snam.it/en/governance-conduct/business-conduct/whistleblowing/index.html
	102-34	Nature and total number of critical concerns	RCG "Snam's legal framework"	
	102-35	Remuneration policies	RR "Remuneration Policy and Guidelines"	
	102-36	Process for determining remuneration	RR "Governance of the renumeration process"	
	102-37	Stakeholders' involvement in remuneration	RCG "The meeting and the shareholders'rights" RR "Remuneration Policy and Guidelines"	
	102-38	Annual total compensation ratio	Confidential disclosure	
	102-39	Percentage increase in annual total compensation ratio	Confidential disclosure	
Stakeholder engagement	102-40	List of stakeholder groups	SR "Stakeholder relationships"	
	102-41	Collective bargaining agreements		100% Non-management personnel are subject to the CCNL (Energy and Oil Contract, Metalworking and Mechanical Engineering Industry contract, Commercial Activities contract). For executive personnel, the National Contract for Managers of Companies producing Goods and Services applies.
	102-42	Identifying and selecting stakeholders	SR "Stakeholder relationships"	
	102-43	Approach to stakeholder engagement	SR "Stakeholder relationships"	
	102-44	Key topics and concerns raised	SR "Stakeholder relationships"	

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
GRI 102 General disclosure 2016				
Reporting process	102-45	Entities included in the consolidated financial statements		There are no differences in the consolidation scope between the Sustainability Report and the Annual Report
	102-46	Defining report content and topic Boundaries	SR "Stakeholder relationships" SR "Methodological note"	
	102-47	List of material topics	SR "Stakeholder relationships"	
	102-48	Restatements of information		Any changes with respect to the previous Sustainability Report have been specifically indicated in the text
	102-49	Changes in reporting	SR "Stakeholder relationships" SR "Methodological note"	13 material topics resulted from the materiality analysis (14 last year). In particular, the "Relations with the authorities and quality of services" topic switched from being material to relevant. The topic remains important for the company which oversees it constantly
	102-50	Reporting period	SR "Methodological note"	
	102-51	Date of most recent report	SR "Methodological note"	
	102-52	Reporting cycle	SR "Methodological note"	
	102-53	Contact point for questions regarding the report	SR "Methodological note"	
	102-54	Claims of reporting in accordance with the GRI Standards	SR "Methodological note"	
	102-55	GRI content index	SR "GRI Content Index"	
	102-56	External assurance	SR "Methodological note"	
Economic material topics (GRI 200)				
GRI 201 Economic Performance 2016	103-1, 103-2, 103-3	Management Approach	SR "Snam's profile"	
	201-1	Direct economic value generated and distributed	SR "Business activities" SR "Performance figures and indicators"	
	201-2	Financial implications and other risks and opportunities due to climate change	RS "Today and tomorrow's challenge. Hydrogen and green gases" SR " Protecting the climate and the air" TCFD "Risk and Opprtunities related to Climate Change"	
	201-3	Defined benefit plan obligations and other retirement plans		In 2019, Snam fulfilled its social obligations under the applicable employment contracts. The active funds are for non-managerial staff or the Energy Fund, while for managers the PREVINDAI and the FOPDIRE
	201-4	Financial assistance received from government		Not applicable

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
Economic material topics (GRI 200)				
GRI 203 Indirect economic impacts 2016	103-1, 103-2, 103-3	Management Approach	SR "The supply chain" DNF "Social aspects"	
	203-1	Infrastructure investments and services supported	SR "Snam's profile" SR "The pursue of a new energy" SR "Protecting the climate and the air" TCFD "The commitment to the energy efficiency"	
	203-2	Significant indirect economic impacts	SR "The supply chain"	
GRI 205 Anticorruption 2016	103-1, 103-2, 103-3	Management Approach	SR "The fight against corruption and illegality" DNF "Anticorruption and bribery"	
	205-1	Operations assessed for risks related to corruption		All divisions are monitored in relation to the risk of corruption
	205-2	Communication and training about anti-corruption policies and procedures	SR "The fight against corruption and illegality" SR "The supply chain" RF "Professional Enhancement" DNF "Anticorruption and bribery"	The 100% of the Snam employees and members of the BoD have been informed about the Snam Anticorruption Policies and Guideline
	205-3	Confirmed incidents of corruption and actions taken	DNF "Anticorruption and bribery"	In 2019, no cases of corruption were established.
Environmental material topics (GRI 300)				
GRI 302 Energy 2016	103-1, 103-2, 103-3	Management Approach	SR "Protecting the climate and the air" DNF "Environment, health and safety aspects"	
	302-1	Energy consumption within the organization	SR "Protecting the climate and the air" SR "Performance figures and indicators" TCFD "The commitment to the energy efficiency"	
	302-2	Energy consumption outside of the organization	-	Information not available
	302-3	Energy intensity	SR "Performance figures and indicators"	Within the performance indicators the most significant number is reported (transportation activity)
	302-4	Reduction of energy consumption	SR "Protecting the climate and the air" SR "Performance figures and indicators"	In this document, the reductions in energy consumption obtained through efficiency measures are quantified by reporting the corresponding CO_{2eq} emissions avoided.
	302-5	Reductions in energy requirements of products and services		Not applicable

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
Environmental material topics (GRI 300)				
GRI 304 Biodiversity 2016	103-1, 103-2, 103-3	Management Approach	SR "Protecting the local area and biodiversity" DNF "Environment, health and safety aspects"	
	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SR "Protecting the local area and biodiversity"	
	304-2	Significant impacts of activities, products, and services on biodiversity	SR "Protecting the local area and biodiversity"	
	304-3	Habitats protected or restored	SR "Protecting the local area and biodiversity"	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	SR "Protecting the local area and biodiversity"	
GRI 305 Emissions 2016	103-1, 103-2, 103-3	Management Approach	SR "Protecting the climate and the air" DNF "Environment, health and safety aspects"	
	305-1	Direct (Scope 1) GHG emissions	SR "Protecting the climate and the air" SR "Performance figures and indicators"	
	305-2	Energy indirect (Scope 2) GHG emissions	SR "Protecting the climate and the air" SR "Performance figures and indicators"	
	305-3	Other indirect (Scope 3) GHG emissions	SR "Protecting the climate and the air" SR "Performance figures and indicators"	
	305-4	GHG emissions intensity	SR "Protecting the climate and the air" SR "Performance figures and indicators" TCFD "The reduction of the GHG emissions"	
	305-5	Reduction of GHG emissions	SR "Protecting the climate and the air" TCFD "The reduction of the GHG emissions"	
	305-6	Emissions of ozone-depleting substances (ODS)		Not significant quantity
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emission	SR "Protecting the climate and the air" SR "Performance figures and indicators"	
Social material topics (GRI 400)				
GRI 401 Employment 2016	103-1, 103-2, 103-3	Management Approach	SR "People" DNF "People management aspects"	
	401-1	New employee hires and employee turnover	SR "People" SR "Performance figures and indicators"	The split of the data by country is not reported because it is not applicable (almost all the employees are located in Italy).

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
Social material topics (GRI 400)				
GRI 401 Employment 2016 (follows)	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees		There are no differences in access to company benefits
	401-3	Parental leave	SR "People"	
GRI 403 Occupational health & safety 2016	103-1, 103-2, 103-3	Management Approach	SR "People" DNF "Environment, health and safety aspects"	
	403-1	Workers representation in formal joint management–worker health and safety committees		Workers are represented by law (ref. TU Dlgs81/2008) and by national contracts.
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	SR "People" SR "Performance figures and indicators" DNF "Environment, health and safety aspects"	The employees and contractors' injuries happened all in Italy (2 employees and 3 contractors in Northern Italy, 1 contractor in the Central and 1 contractor in the Southern part of Italy). The injuries involved only male workers.
	403-3	Workers with high incidence or high risk of diseases related to their occupation	SR "People"	
	403-4	Health and safety topics covered in formal agreements with trade unions		During the year, there were no trade union agreements in this area.
GRI 404 Training and Education 2016	103-1, 103-2, 103-3	Management Approach	SR "People" DNF "People management aspects"	
	404-1	Average hours of training per year per employee	SR "People" SR "Performance figures and indicators"	
	404-2	Programs for upgrading employee skills and transition assistance programs	SR "People"	
	404-3	Percentage of employees receiving regular performance and career development reviews	SR "People"	The number of employees evaluated within the "Performance Management" is split by position and gender (page 80).
GRI 405 Diversity and equal opportunities 2016	103-1, 103-2, 103-3	Management Approach	SR "People" DNF "People management aspects"	
	405-1	Diversity of governance bodies and employees	SR "People" SR "Business integrity" SR "Performance figures and indicators"	
	405-2	Ratio of basic salary and remuneration of women to men	SR "People" SR "Performance figures and indicators"	

GRI Standard	Disclosure	Description	Reference Document and page number	Omissions - Notes
Social material topics (GRI 400)				
GRI 406 Non discrimination 2016	103-1, 103-2, 103-3	Management Approach	SR "People" DNF "Protecting Human Rights"	
	406-1	Incidents of discrimination and corrective actions taken	DNF "Protecting Human Rights"	
GRI 413 Comunità locali 2016	103-1, 103-2, 103-3	Management Approach	SR "Stakeholder relationships" SR "Protecting the local area and biodiversity" DNF "Social aspects"	
	413-1	Operations with local community engagement, impact assessments, and development programs	SR "The pursue of a new energy" SR "Protecting the local area and biodiversity" SR "People"	
	413-2	Operations with significant actual and potential negative impacts on local communities	SR "Protecting the local area and biodiversity"	
GRI 419 Socio-Economic Compliance 2016	103-1, 103-2, 103-3	Management Approach	RS "Business integrity" DNF "Anticorruption and bribery"	
	419-1	Non-compliance with laws and regulations in the social and economic area	DNF "Anticorruption and bribery" RF "Disputes and other measures" (in "Notes to the consolidated financial statements"), "Criminal cases" (in "Notes to the consolidated financial statements"), "Autorità di Regolazione per Energia Reti e Ambiente – ARERA" (in "Notes to the consolidated financial statements")	
Other non GRI issues				
Green business	103-1, 103-2, 103-3	Management Approach	SR "Snam's profile" SR "Environment" RF "Innovation for business development" (in "Other results and management impacts") TCFD "The leadership towards energy transition"	
Reliability of infrastructures and business continuity	103-1, 103-2, 103-3	Management Approach	SR "Snam's profile" SR "Environment" RF "Innovation for business development" (in "Other results and management impacts")	
Brand reputation	103-1, 103-2, 103-3	Management Approach	SR "Stakeholder relationships	
Innovation	103-1, 103-2, 103-3	Management Approach	SR "The pursue of a new energy" SR "Environment" RF "Innovation for business development" (in "Other results and management impacts")	

Global Compact reconciliation table

The Snam management model takes its inspiration from the Code of Ethics and is based on management policies founded on the principles of the United Nations Universal Declaration of Human Rights, the Fundamental Conventions of the ILO and the OECD Guidelines for Multinational Enterprises. The Code of Ethics can be consulted at the address http://www.snam.it/en/governance-conduct/business-conduct/code-of-ethics/ and the policies can be consulted on the Company's website at http://www.snam.it/en/Sustainability/strategy_and_commitments/index.html.

The ten principles	Sustainability Report 2019	Page
Principles, 1, 2 - Companies are asked to promote and respect universally recognised human rights in their respective spheres of influence and to make sure they are not complicit, even indirectly, in human rights violations.	**Human rights** ■ Snam operates in the framework of the United Nations Universal Declaration of Human Rights, the Fundamental Conventions of the ILO - International Labour Organisation - and of the OECD Guidelines for Multinational Enterprises and the principles enshrined in the United Nations Global Compact (principles enshrined in its own code of ethics). ■ Snam promotes sustainability and business ethics in its supply chain and conducts audits in the field of human rights, occupational safety of suppliers and subcontractors. ■ Snam safeguards occupational safety and health through training, sensitisation raising and education initiatives	104-105 88-94 78, 81-82
Principles 3, 4, 5, 6 - Businesses are required to uphold freedom of association and the recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labour; the abolition in practice of child labour; and the elimination of all forms of discrimination in respect of employment and work.	**Labour** ■ Snam respects everyone's dignity, and offers equal opportunities in every phase and every aspect of the employment relationship, avoiding all forms of discrimination based on sex, age, health, nationality, political opinion or religious views. ■ Snam applies the Energy and Petroleum agreement and guarantees trade union rights for all workers. ■ Snam holds meetings with Trade Union organisations at a national and local level dedicated to the analysis of business development projects and new organisational structures ■ Snam develops initiatives to reconcile work and life ■ Snam provides its employees with training and professional development opportunities	73-76 71-72, 85 85 83-84 77-80
Principles 7, 8, 9 - Companies are asked to maintain a preventive approach to environmental challenges; to undertake initiatives that promote greater environmental responsibility; and to encourage the development and dissemination of technologies that respect the environment.	■ Snam develops projects to strengthen its operational excellence and to contribute to the containment of greenhouse gas emissions. ■ Protecting the environment and biodiversity are integral parts in defining Snam's corporate policies and investment decisions ■ All of Snam's activities are monitored by certified environmental management systems (ISO 14001) ■ Snam performs specific energy management and CO_2 saving activities ■ Snam also evaluates it suppliers using environmental criteria	54-62 64-68 108-109 55-57 92-93
Principle 10 - Companies commit to fighting corruption in any form, including extortion and bribery.	**Anti- corruption** ■ Snam disseminates ethical principles and business values ■ Snam collaborates with International Transparency International on anti-corruption and governance ■ Snam provides training activities in matters of legality and anti-corruption ■ Snam conducts reputational checks of suppliers and subcontractors ■ No cases of corruption were reported in 2019	104, 106-107 107 107 108 125
Support for Sustainable Development Goals	Snam also undertakes to contribute to the sustainable development of the economy and future society with reference to the Sustainable Development Goals defined by the UN and expresses its contribution to all the goals. With reference to the strategy of the integration of SDGs into the business model, Snam is particularly active in goals 3,4,5,7, 8, 9,10,12, 13, 15,17.	48-49

Letter of Assurance

Independent auditor's report on the Sustainability Report of the Snam Group as of 31 December 2019

To the Board of Directors of Snam SpA

We have been engaged to perform a limited assurance engagement on the Sustainabilty Report (hereinafter the "Report") of the Snam Group (hereinafter the"Group") for the year ended 31 December 2019.

Responsibility of the Directors for the Sustainability Report

The Directors of Snam SpA are responsible for the preparation of the Report in accordance with the "*Global Reporting Initiative Sustainability Reporting Standards*" defined in 2016 by GRI – *Global Reporting Initiative*, ("GRI Standards"), as indicated in the paragraph "Methodogical note" of the Sustainability Report.

The Directors are also responsible for the implementation of the internal controls that they consider necessary to prepare a Sustainability Report that is free from material misstatement, whether due to fraud or unintentional behaviours or events.

Moreover, the Directors are responsible for defining the sustainability performance targets of the Group, as well as for identifying the stakeholders and the significant aspects to be reported.

Auditor's Independence and Quality Control

We are independent in accordance with the principles of ethical and independence set out in the *Code of Ethics for Professional Accountants* published by the *International Ethics Standards Board for Accountants*, which are based on fundamental principles of integrity, objectivity, competence and professional diligence, confidentiality and professional behaviour. Our audit firm adopts *International Standard on Quality Control 1 (ISQC Italy 1)* and, accordingly, maintains an overall quality control system which includes process and procedures for compliance with ethical and professional principles and with applicable laws and regulations.

Auditor's responsibility

We are responsible for expressing a conclusion, on the basis of the work performed, regarding the compliance of the Report with the requirements of the GRI Standards. We conducted our engagement in accordance with "*International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Financial Information" (*hereafter "ISAE 3000 Revised"), issued by the *International Auditing and Assurance Standards Board* (IAASB) for limited assurance engagements. The standard requires that we plan

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and apply procedures in order to obtain limited assurance that the Report is free from material misstatement.
The procedures performed in a limited assurance engagement are less in scope than those performed in a reasonable assurance engagement performed in accordance with ISAE 3000 Revised ("*reasonable assurance engagement*") and, therefore, do not provide us with a sufficient level of assurance that we have become aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

The procedures performed on the Sustainability Report were base on our professional judgement and consisted in interviews, primarily with company personnel responsible for the preparation of the information presented in the Report, analysis of documents, recalculations and other verification procedures.

In particular, we performed the following procedures:

1) analysis of the reasons for the coexistence of the NFS (Consolidated Non-Financial Statement required under Articles 3, 4 and 7 of Legislative Decree 254/2016) and the Sustainability Report and the elements that differentiate the two documents;
2) analysis of the process aimed at defining the significant reporting areas to be disclosed in the Sustainability Report, with regard to the methods for their identification, in terms of priority for the various stakeholders, as well as the internal validation of the process findings;
3) comparison of the financial information reported in the "Snam's profile" and "Performance figures and indicators" chapters of the Report with the information included in the Group's Consolidated Financial Annual Report;
4) understanding of the processes underlying the preparation, collection and management of the significant qualitative and quantitative information included in the Report.

   In particular, we held meetings and interviews with the management of Snam SpA and we performed limited analysis of documentary evidence, to gather information about the processes and procedures for the collection, consolidation, processing and submission of the non-financial information to the function responsible for the preparation of the Sustainability Report.

   Moreover, for material information, considering the activities and characteristics of the Group:

   - at holding level
     a) with reference to the qualitative information included in the Sustainability Report, we carried out interviews and acquired supporting documentation to verify their consistency with available evidence;
     b) with reference to quantitative information, we performed analytical procedures as well as limited tests, in order to assess, on a sample basis, the accuracy of consolidation of the information.
   - for the following sites, compression plant of Poggio Renatico (Snam Rete Gas SpA) and storage plant of Minerbio (Stogit SpA), which were selected on the basis of their activities, their contribution to the performance indicators at a consolidated level and their location, we carried out site visits during which we met local management and gathered supporting documentation, on a sample basis, regarding the correct application of the procedures and calculation methods used for the key performance indicators.

Conclusions

Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report of Snam Group as of 31 December 2019 has not been prepared, in all material respects, in compliance with the GRI Standards as disclosed in the paragraph "Methodological Note" of the Report.

Milan, 11 May 2020

PricewaterhouseCoopers SpA

Signed by

Giulio Grandi
(Partner)

This report has been translated from the Italian original solely for the convenience of international readers. We have not performed any controls on the English translation of the Sustainability Report 2019 of Snam Group.

Energy to inspire the world

By
Snam

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